

## Proceedings of the 1st ICOPEM International Conference on Psychology, Education and Mental Health: Education Innovation and Mental Health in Industrial Era 4.0

Maputra, Yantri (Ed.)

Veröffentlichungsversion / Published Version  
Konferenzband / conference proceedings

### Empfohlene Zitierung / Suggested Citation:

Maputra, Y. (Ed.). (2019). *Proceedings of the 1st ICOPEM International Conference on Psychology, Education and Mental Health: Education Innovation and Mental Health in Industrial Era 4.0*. Warsaw: Sciendo. <https://doi.org/10.1515/9783110679977>

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PROCEEDING OF THE 1ST ICOPEM  
INTERNATIONAL CONFERENCES  
PSYCHOLOGY, EDUCATION, AND  
MENTAL HEALTH

EDUCATION INNOVATION AND MENTAL  
HEALTH IN INDUSTRIAL ERA 4.0

9TH -10TH SEPTEMBER, 2019 PADANG,  
WEST SUMATERA, INDONESIA

EDITOR

Amatul Firdausa Nasa, M.Psi., Psikolog  
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# Preface

**Izzanil Hidayati, S.Psi., M.A**

**General Chair Conference ICoPEM**

*Assalamu'alaikum Warohmatullahi Wabarokatuh*

Greetings!

It gives me great pleasure to welcome you to the International Conference on Psychology, Education, and Mental Health (ICoPEM) 2019. This is the first conference held in the Psychology department, Faculty of Medicine, Universitas Andalas. The main theme of this conference is Education Innovation and Mental Health in Industrial Era 4.0. For that issues, we'll hear from our keynote speakers and invited lecturers to speak about how education and mental health in Industrial Era 4.0, and for the next session you can discuss with the presenter who sharing about their great research.

Industrial 4.0 make a significant influence on our lives. The advance of technology has changed many aspects of the living process. The influenced alternation of this development was starting from ritual in daily living like using technology in every aspect of our lives that impact education, job offers, and the values in society. One way to accommodate these changes is modification in the curriculum to face industry 4.0. The purpose of this conference is to discuss issues about the consequence of industry 4.0 in education and mental health aspect.

As the General Chair of this conference, we would like to express our gratitude to the keynotes speakers, Prof. Kate Cain from Lancaster University, Robert Lemelson, Ph.D from University of California, Seinenu M. Thein-Lemelson, Ph.D from University of California, Berkeley and Yantri Maputra, Ph.D from Universitas Andalas. Thank you also to our invited speakers, Prof. Madya Dr. Mahazan Abdul Muthalib @Taib from Universiti Sains Islam Malaysia, Dr. dr. Wirsma Arif Harahap, SpB(K)-Onk from Universitas Andalas, and Dr. Marjoni Imamora, M.Si from IAIN Batusangkar

We hope that you will enjoy the conference and that your interaction with your colleagues at this conference will stimulate a creative exchanged of ideas and will be personally rewarding. Finally, I would like to welcome you to Padang, West Sumatera. You will find many interesting destinations and kind of delicious foods. I will be all over the conference and would like to personally meet and warmly welcome every one of you

**Dr. dr. Wirsma Arif Harahap, SpB(K)-Onk**  
**Dean of Medicine Faculty Universitas Andalas**

*Assalamu'alaikum Warohmatullahi Wabarokatuh*

Greetings!

It is my pleasure to welcome you to the International Conference on Psychology, Education, and Mental Health (ICoPEM) 2019. ICoPEM is planned as an annual event of The Psychology Department of Medical Faculty Universitas Andalas, in collaboration with IAIN Batusangkar, Universiti Teknologi MARA, Institut Pendidikan Guru Kampus Raja Melewar, and Universiti Sains Islam Malaysia. We gather in this event to share knowledge and to strengthen friendship between researchers and between societies

This year's theme "Education Innovation and Mental Health in Industrial Era 4.0" is to support the urgency of a healthy person as one of the elements to human well-being, and education to keep the pace of era 4.0. With the development of industrial which influence psychological, educational, and mental health factors of human, it is important to do the research that primarily focuses on the consequences of this development in society. This event's mission is to create an academic climate of excellence by gathering the researcher. By meeting and sharing their works, the academicians and students will be able to deepen their understanding of the issue of their interest. Hopefully, this interaction would increase cooperation among scholars in this region.

It is a pleasure we are trusted to host this event in our home this year, as a beginner we are aware of many shortages but do not decrease our effort to bring our best to you. Hope you enjoy this event and we can meet again in years to come.

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# Mapping of Psychological Problems in Women Prisoners

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## **Abstract**

Mapping of Psychological Problems in Women Prisoners. Women prisoners will face psychological burdens while living in prison. It occurs not only because of the physical condition but also some complex problems in prison. Psychological problems are related to mental and neurological problems. This study aims to describe psychological problems in women prisoners. This research was done using a quantitative descriptive approach with 78 women prisoners in Lapas Klas IIB Padang. The research used Small Group Discussion, and Depression Anxiety Stress Scale 42 (DASS 42) by Lovibond & Lovibond (1995) consisted of 42 items. The results showed that women prisoners experienced three main psychological problems, including depression, anxiety, and stress with different levels.

**Keywords:** *Women prisoners, psychological problems, problems mapping*

## **INTRODUCTION**

The crime is the action against the law, such as theft, robbery, murder, and so forth. It occurs every day, as reported by printed or electronic and printed media. In West Sumatera, it seems never resolved and continue to increase every day. As reported by Sumbartoday, the number of crimes in West Sumatera from 2005 to 2015 was an increase to 9,074 cases, which 907 new cases per year, 75 new cases per month, and about one case on 2-3 days. It also has an impact on the increasing number of criminals.

Nowadays, the trend is changed; many reported criminal cases included women. It is not a new phenomenon, although the number of women prisoners is smaller than men, it continues to increase. The people who committed to crime and sentenced to be prisoned is called prisoner. Law number 12 1995 states that a prisoner is a person who is convicted based on a court decision that has obtained permanent legal force in prison. Women prisoners in Lapas Kelas IIB Padang were convicted for several cases, including corruption, drugs dealer, etc.

Women prisoners face various problems. Mulyadi (2005) reported that several problems regarding privacy, such as losing freedom, losing possession, losing security, and losing heterosexual relations. Moreover, women prisoners will face the fact that as a mother, they could not take care of their children.

All the pressures experienced by prisoners in prison can cause various diseases, both physical and psychological problems, such as daydreaming, being easily offended, attacking others, and even committing suicide (Rininta, 2004). A study states that a prison is a place that is full of pressure for prisoners because they have low self-control. Several had reported that prisoners

have emotional distress, such as depression, anxiety, and stress (Buckaloo, Krug, & Nelson, 2009).

Research conducted in Brazilian prisons in 2016 states that 35.8% of male prisoners and 57.9% of female prisoners experience stress. Moreover, the study also reported that female prisoners showed higher depressive symptoms than male prisoners. A survey conducted in 12 countries with 22,790 prisons indicated that about 12% of female prisoners were depressed, followed by male prisoners 10% (Fazel & Danesh, 2002). A similar study conducted in Sragen, Indonesia, indicated that prisoners had experience depression. Using BDI, the researchers reported that in 2006 toward 74 prisoners, 100% were depressed. 72% experience severe depression, 23% moderate level, and 5% low level (Pramudyawati, 2006).

In the sociology perspective, it was reported that women prisoners felt stress because of losing freedom, separation from their families, and limited activities. The social separation will lead to pressure for mothers (Hurley & Dunne, 1991). Research conducted by the University of South Wales shows that 36% of mental health problems felt by prisoners are anxiety, and women have a higher impact rate than men, 61%: 39% (Butler, Allnut, Cain, Owens, & Muller, 2005). The results of 62 surveys in 12 countries toward 22,790 prisoners found that every 6 months there was a prevalence of psychosis in men 3.7% and women 4%, major depression in men 10% and women 12% and personality disorders in men 65% and women 42% (WHO Conference on Women's Health in Prison, 2008).

Zadeh & Ahmad (2012) explored the mental health problems of 16 women prisoners (21 to 60 years) in Karachi prison. It was found that some of the problems regarding stress, depression, anxiety, etc.

Stress is a condition that has been experienced by every individual. Stress is a form of reaction of organisms or individuals to various demands originating from the environment, regardless of the role of the individual (Selye & Cannon in Lazarus & Folkman, 1984). Anxiety is a natural thing that has ever been experienced by every human being. It is considered as a part of everyday life and natural (Wiramihardja, 2005).

Depression can be attributed to several attributes conditions, such as specific mood changes: sad, alone, apathetic; negative self-concept associated with self-blame; regressive and the desire to escape: the desire to escape, hide, or die; changes in behavior: anorexia, insomnia, loss of sexual desire; and changes in activity levels: decreasing or increasing (Beck, 1967).

The suffering can be managed or reduced by intervention programs in prison. Of course, the programs cannot solve all the needs and problems experienced by prisoners. There are still many cases of suicide in prison that occur in Indonesia, which indicated prevention programs is not enough. For example, there was a woman prisoner who attempts to commit suicide by taking a cleaning fluid in Lapas Kelas II Muaro Padang.

The results of the intake interview with Chief of Coaching and Education in Lapas Class IIA Muaro Padang revealed that in the past, many activities could be carried out by prisoners. However, the intervention programs for prisoners seems not working. Indeed there are some intervention and education programs provided by practitioners that are carried out periodically, but most of them are not focused on the problems and needs of prisoners. The current research explores the psychological problems of prisoners by using standard instruments. The results will be arranged into maps/profiles of psychological problems. The results of this study will be useful for the prison and related parties, especially as a reference for providing problem-based intervention.

The psychological burden felt by women prisoners is not due to a single factor since they face complex problems. Any problem intervention program should be based on a clear understanding of the cause and underlying situation because any intervention is not going to be a solution when it is unable to solve the problem. Hence, it is necessary to create a problem mapping or problem profiling to find out the root causes of prisoners' behavior problems.

## METHOD

This research is quantitative descriptive research with 78 women prisoners in Lapas Klas IIB Padang. This is the description of the participants in this research based on their case. The initial data collection was carried out by forming small groups and conducting focus group discussions (FGD). Each group has six people, and they began to be guided by a facilitator to know they feel while serving time. From the results of these FGD, the most common problems expressed by women prisoners are stress, depression, and anxiety through symptoms in each problem. To be precise, the results of FGD can be seen below:

**Table 1. Participants Description Based On Case**

No.	Case	Sum of Women Prisoners
1.	Drug	48 people
2.	Theft	6 people
3.	Precaution	6 people
4.	Human Trafficking	1 people
5.	Deception	3 people
6.	Immoral	1 people
7.	Counterfeit	1 people
8.	Criminal	1 people
9.	Corruption	10 people
10.	Robbery	1 people
	<b>Total</b>	<b>78 people</b>

The initial data collection was carried out by forming small groups and conducting focus group discussions (FGD). Each group has six people, and they began to be guided by a facilitator to know they feel while serving time. From the results of these FGD, the most common problems faced by women prisoners are stress, depression, and anxiety through symptoms in each problem. The results of FGD can be seen below:

**Table 2. The Results of FGD**

No.	Time	Situation	That prisoners feel and experience
1.	First 6 months serving time	When in the cell; when visiting hours; when they think about family, etc	Feel sad (sometimes), like to delay things (for example: taking a bath, eating, etc.); have a headache, often forget about something (for example date, day, and to wear something)
2.	Above 6 months of serving time	When they're alone, all-day	Feel sad all daylong (then crying); feeling worthless; constantly blaming herself; loss of excitement; loss of interest in doing something (for example: knit, watch tv, etc.); have an intention to commit suicide.
3.	One year before the release	When they think about getting out (how about the social stigma); when they think about work, etc	Hearts problems; not well-sleeping; cold sweat; take a focus is very hard; want to run away from reality

After that, to find out the level of each psychological problem experienced, Depression Anxiety Stress Scale 42 (DASS 42) by Lovibond & Lovibond (1995) is used. DASS is a set of subjective scales formed to measure the negative emotional states of depression, anxiety, and stress. DASS can be used either by groups or individuals for research purposes. The following levels are each psychological problem:

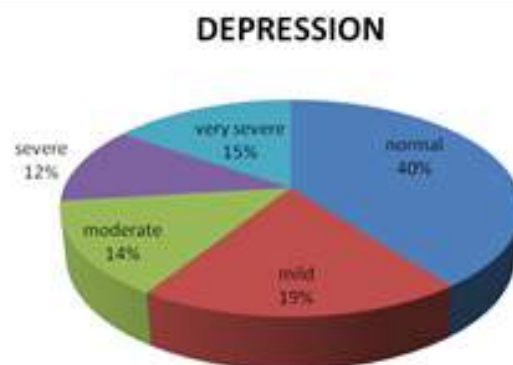
**Table 3. Scale Categorisation**

	Normal	Mild	Moderate	Severe	Very Severe
Depression	0 – 9	10 – 13	14 – 20	21 – 27	28+
Anxiety	0 – 7	8 – 9	10 – 14	15 – 19	20+
Stress	0 – 14	15 – 18	19 – 25	26 – 33	34+

After being distributed by DASS, another group discussion was held to look deeper into the psychological problems of the women prisoners. The analytical method used in this research is descriptive analysis. This method is used to examine the variables in the study, namely, psychological problems. Then do a mapping of psychological problems in women prisoners in Lapas Klas IIB Padang.

## RESULTS

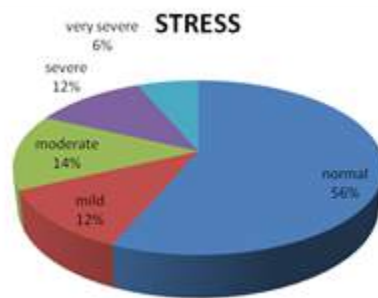
From the research that has been done, the results show that psychological problems that often arise in women prisoners in Lapas Klas IIB Padang are as follows:



**Fig. 1. Level of Depression**



**Fig. 2. Level of Anxiety**



**Fig. 3. Level of Stress**

From the results of the calculations that have been carried out obtained data as follows:

**Table 4. Psychological Problems in women Prisoner in Lapas Klas IIB Padang**

Psychological Problems	Level	Amount
Depression	Normal	31 prisoners
	Mild	15 prisoners
	Moderate	11 prisoners
	Severe	9 prisoners
	Very Severe	12 prisoners
Anxiety	Normal	19 prisoners
	Mild	5 prisoners
	Moderate	25 prisoners
	Severe	9 prisoners
Stress	Very Severe	20 prisoners
	Normal	44 prisoners
	Mild	9 prisoners
	Moderate	11 prisoners
	Severe	9 prisoners
	Very Severe	5 prisoners

**Table 5. Psychological Problems in Women Prisoner in Lapas Klas IIB Padang Based On Case**

Case	Psychological Problems
Drug	Stress, Depression, Anxiety
Theft	Stress, Depression, Anxiety
Precaution	Stress, Depression, Anxiety
Human Trafficking	Depression, Anxiety
Deception	Depression, Anxiety
Immoral	Depression
Counterfeit	Anxiety
Criminal	Anxiety
Corruption	Stress, Depression, Anxiety
Robbery	Stress

## DISCUSSION

This study aims to map the psychological problems experienced by women prisoners in Lapas Klas IIB Padang. From the mapping, it was found that women prisoners experienced 3 major psychological issues, including depression, anxiety, and stress. Each psychological problem will be reviewed further in the section below.

As prisoners, women in Lapas Klas IIB Padang experience depression. Beck (1967) states that depression can be defined in terms that follow several attributes such as specific mood changes: sad, alone, apathetic; negative self-concept associated with self-blame; regressive and the desire to escape: the desire to escape, hide, or die; changes in behavior: anorexia, insomnia, loss of sexual desire; and changes in activity levels: decreasing or increasing.

The results showed that there were 31 people with normal depression, 15 people with depression at mild level 11 people with depression at moderate levels, 9 people with depression at severe levels, and 12 people with depression at very severe levels. These different levels show how much and how severe depression symptoms appear in women prisoners.

The study is in line with research conducted at the Surabaya Meadeng Detention Center, which states that 24 respondents had mild depression, 59 respondents had moderate depression, and 36 respondents had severe depression. The study also highlights several factors that influence depression in female prisoners, including biological, genetic, and psychosocial factors (Kirana, Nurlela, Septiani, 2017).

The second psychological problem that arises is anxiety. Anxiety is a natural feeling; people feel fear or loss of self-confidence that is not clear in origin or form (Wiramihardja, 2005). From the mapping results above it was found that 19 people with anxiety at normal levels, 5 people with anxiety at mild levels, 25 people with anxiety at moderate levels, 9 people with anxiety at severe levels, and 20 people with anxiety at very severe levels.

Research conducted by Utari, et al. (2012) who took the location in the Class IIA Women's Prison in Bandung stated that anxiety among women-assisted residents approaching freedom was 38% severe anxiety, 28% moderate anxiety, 34% mild anxiety. The study reported among the factor affected the women prisoners' anxiety is that the time for freedom is close. Meanwhile, in terms of age, women-guided residents who are prone to experiencing anxiety are those who are young.

The last psychological problem that arises is stress. Taylor (1991) defines stress as a process that occurs within individuals in or to assess events or events in life (which are dangerous, threatening, or challenging individual self), and how individuals respond to each of these events. From the mapping results above, it was found that 44 people with stress at normal levels, 9 people with stress at mild levels, 11 people with stress at moderate levels, 9 people with stress at severe levels, and 5 people with stress at very severe levels.

Similar research conducted on women prisoners in Lapas IIA Malang Women stated that female prisoners experienced high-stress levels by as much as 40%, and the rest experienced low levels of stress (Windistiar, 2016).

Women prisoners experience stress at the beginning of their sentence because they are still adjusting to the district. They experience depression when their stress is not resolved, and remain for the rest of their sentence time, usually above 6 months. Then the anxiety experienced by women prisoners at the end of their sentenced time or before one year of release.

## CONCLUSIONS

Based on the result of the research, the conclusions are:

1. Women prisoners in Lapas Klas II Padang experienced stress, depression, and anxiety at different levels as a form of psychological problems.

2. The stress is experienced by women prisoners mostly during the at the beginning of the sentence (first six months). The anxiety also experienced when women prisoners were about to be released. Meanwhile, the depression is experienced during their sentence time(6 months and above).

## Recommendations

Based on the result of the study, the researcher suggests:

1. Women prisoners will be faced with various problems, both from outside the prison and from inside the prison. The problems put pressure on the prisoners. There is still much that can be done by prisoners to overcome the problem, such as sharing with their fellow prisoners to relieve the burden. And then make maximum use of all forms of activities in prisons so that there are other activities that can be carried out by women prisoners.
2. As the authority, the Lapas has a significant role in helping prisoners during their sentences. The Lapas can provide seminars related to psychological problems that can be experienced by women prisoners and how to overcome them. Then, the re-implementation of activities that can be done together, for example, morning exercises, etc. The provision of facilities is also important to improve the knowledge and skills of the prisoner during their sentence. Lapas can providing professional staff related to problem-based interventions that can be enforced on inmates so that suicide rates in Lapas can decrease.
3. For further researchers who are interested in doing the same research can be directed to find a pattern by covering many other subjects. Moreover, researchers can add other variables so that the scientific repertoire is associated with psychological problems, especially in women prisoners getting richer. Future researchers can also use other research methods to enrich psychological studies further

## REFERENCES

- Arikunto, S. (2010). *Prosedur Penelitian: Suatu Pendekatan Praktek*. Jakarta: PT. Rineka Cipta.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1967). *Cognitive Therapy of Depression*. New York: The Guilford Press
- Buckaloo, J.B., Krug, S.K., & Nelson, K.B. (2009). Exercise and The Low-Security Inmate. *The Prison Journal*, 89, 328-343.
- Butler, T., Allnut, S., Cain, D., Owens, D., & Muller, C. (2005). Mental Disorder in The New South Wales Prisoner Population. *Aust N Z Journal Psychiatry*, 39 (5), 407-13.
- Constantino, P., Gonvalces, A.S., & Wernersbach, L.P. (2016). The Impact of Prison on The Mental Health of Prisoners in The State of Rio De Janeiro, Brazil. *Article: Ciencia and Suicide Collectiva*, 21 (7) 2089-2099.
- Corsini, R.J. & Wedding, D. (2000). *Current Psychotherapies*. USA: Brooks/ Cole.
- Departemen Kesehatan RI. (1998). *Pedoman Penggolongan dan Diagnosis Gangguan Jiwa di Indonesia (PPDGJ)*. Edisi III. Jakarta: Dirjen Pelayanan Medis RI.
- Iqbal, Hasan. (2002). *Metodologi Penelitian dan Aplikasinya*. Bogor: Ghalia Indonesia.
- Fazel, S., & Danesh, J. (2002). Serious Mental Disorder in 23000 Prisoners: A Systematic Review of 62 Surveys. *The Lancet*. 359.

- Hurley, W. & Dunne, P.M. (1991). Psychological Distress and Psychiatric Morbidity in Women Prisoners. *Australian and New Zealand Journal of Psychiatry*, 25, 461-470.
- Kirana, SAC., Nurlela, L. & Septiani, F. (2017). Tingkat Depresi Narapidana Wanita Penghuni Rutan Medaeng Surabaya. Mojokerto: Sekolah Tinggi Ilmu Kesehatan Majapahit Mojokerto.
- Kerlinger, F.N., (2006). Asas-asas Penelitian Behavioral. Edisi Ketiga. Yogyakarta: Gadjah Mada University Press.
- Lazarus, R.S. & Folkman, S. (1984). *Stress Appraisal & Coping*. Newyork: Springer Publishing Company.
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for The Depression Anxiety Stress Scales*. (2nd. Ed.). Sydney: Psychology Foundation.
- Marnat, G.G. (2010). *Handbook of Psychological Assessment*. Edisi Kelima. Yogyakarta: Pustaka Pelajar.
- Mulyadi, L. (2005). *Pengadilan Anak di Indonesia: Teori, Praktik, dan Permasalahannya*. Bandung: Mandar Maju.
- Pramudiyawati, A. (2006). *Bentuk-bentuk Distorsi Kognitif Pada Narapidana Wanita Yang Mengalami Distorsi Kognitif*. Surakarta: Universitas Muhammadiyah.
- Ramaiah, S. (2003). *Kecemasan: Bagaimana Mengatasi Penyebabnya*. Jakarta: Pustaka Populer Obor.
- Rininta, dkk. (2004). *Kesejahteraan Psikologis Narapidana Remaja di Lembaga Pemasyarakatan*. Kutoarjo: Skripsi.
- Rochman, K.L. (2010). *Kesehatan Mental*. Purwokerto: Fajar Media Press.
- Sadock, Benjamin J. & Sadock, Virginia A. (2014). *Kaplan & Sadock's Concise Textbook of Clinical Psychiatry* (2nd Ed.). USA: Lippincott Williams & Wilkins Inc.
- Sarafino, E. P., & Smith, T. W. (2011). *Health Psychology: Biopsychosocial Interactions* 7nd Edition. New York: John Wiley & Sons.
- Sundari, S. (2004). *Kearah Memahami Kesehatan Mental*. Yogyakarta: PPB FIP UNY.
- Sumbartoday.net. Retrieved on 24 Juni 2018 from <https://www.sumbartoday.net/2017/11/21/2-3-perbuatan-kriminal-terjadi-di-sumbar-setiap-hari-perlunya-upaya-pencegahan/>
- Taylor, S.E. (1991). *Health Psychology* (2 Ed). New York: McGraw Hill, Inc.
- Undang-undang Nomor 12 Tahun 1995 Tentang Pemasyarakatan. Retrieved on 24 Juni 2018 [http://www.ham.go.id/attachments/134\\_UU%20No%2012%20Tahun%201995.pdf](http://www.ham.go.id/attachments/134_UU%20No%2012%20Tahun%201995.pdf)
- Utari, DI., Fitria, N. & Rafiyah, I. (2012). *Gambaran Tingkat Kecemasan pada Warga Binaan Wanita Menjelang Bebas di Lembaga Pemasyarakatan Wanita Klas II A Bandung*. Bandung: Universitas Padjadjaran.
- World Health Organization. (2008). *WHO Conference on Women's Health in Prison*. Ukraine.
- Windistiar, D.E. (2016). *Hubungan Dukungan Sosial dengan Stres Narapidana Wanita*. Malang: Universitas Muhammadiyah Malang.
- Wiramihardja, S. (2005). *Pengantar Psikologi Abnormal*. Bandung: Refika Aditama.
- Zadeh, Z.F. & Ahmad, K.B. (2012). *Mental Helath Issues of Women Prisoners in Karachi Pakistan*. *International Journal of Humanities and Social Science*. 2, 14.



# Using Shaping Technique and Prompting to Increase Duration of On-Task Behavior in a Child with Autism Spectrum Disorder (ASD)

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## Abstract

Children with Autism Spectrum Disorder (ASD) are not interested in doing something they do not like or tend to display off-task behavior. Off-task behavior, along with ASD characteristics, can detain them from classroom activities. Early intervention is needed to help children with ASD reach their full potential in an educational setting. Behavior modification is a widely used intervention and proven effective for dealing with ASD children. In this study, shaping technique and prompting are used to increase the duration of on-task behavior in a 7-year-old boy diagnosed ASD with mild severity. The assignment was paper and pencil. Results showed an increase in the duration stay on-task behavior of R occurred five times more than the duration when taking the baseline or from 3 minutes to 15 minutes. Duration increased, accompanied by a decrease in assistance (prompt) given from the beginning to the end of the session.

**Keywords:** *Autism spectrum disorder (ASD); on-task behavior; behavior modification; shaping technique; prompting*

## INTRODUCTION

The prevalence of Autism Spectrum Disorder (ASD) has increased in the last 20 years (Boyd, Odom, Humphreys, & Sam, 2010). Statistics from the Center for Disease Control and Autism Speaks websites (Goodyear-Brown, 2009) report that one new case of autism is diagnosed every 20 minutes, and 24,000 new cases are diagnosed each year. ASD is usually diagnosed within the first two years of a child's life (Goodyear-Brown, 2009) or before a child is three years old (APA, 2013). Autism Spectrum Disorders (ASD) is a neurodevelopmental disorder characterized by deficits in three main areas, which are a disruption in social interactions, decreased communication skills, limited behavior and interests, and stereotypical activities (Goodyear-Brown, 2009; Boyd, Odom, Humphreys, & Sam, 2010). Children with ASD usually also have some rigidity over their routine or want everything to stay the same (Leekam, Prior, & Uljarevic, 2011), and there is perseveration (repetition) on topics they like (Goodyear-Brown, 2009).

Children with ASD often have to struggle to display appropriate social behavior, work in groups, engage in structured activities, difficulty in maintaining motivation, and display on-task behavior (Fegan, 2011; Reid & Collier, 2002; Samalot-Rivera & Porretta, 2012, in Dieringer, 2012). They also appear to be uninterested or disturbed by social interactions that

are showed from their unfocused attention, inability to joint attention, and often try to escape or avoid the learning environment (Adkins, 2000).

The children need the ability to pay attention to be successful in school. Instead, the inability to focus on the task is the main reason for academic failure, both children with special needs or not (Holifield, Gooman, Hazelkorn, & Heflin, 2010). Children with ASD tend not to be interested in doing tasks that are not in their interest or tend to display off-task behavior. For example, they tend to have a problem when assigned a task that demands to sit quietly in one place and carry out tasks that they are not interested in (Gould, 2015). Children with ASD tend to display off-task behavior due to developmental delays in communication, language, and social (Buschbacher & Fox, 2003). They find it challenging to give attention and focus to the stimulus that provided (Holifield, Goodman, Hazelkorn, & Helfin, 2010). They also have difficulty shifting attention from one thing to another (transition), which is one of the causes of their withdrawal from the social environment in the classroom and does not complete the task given (off-task behavior) (Doyle & Doyle, 2004). According to Gioni (2015), off-task behavior, along with ASD characteristics, can inhibit them from class activities, learning opportunities, and group activities. Children will find it difficult to follow the lessons given in class if they are continually moved or left behind due to the off-task behavior displayed.

R was a 7-year-old boy and met the criteria for autism spectrum disorder (ASD) with a mild severity based on DSM 5. He shows the difficulty in focusing on and completing the task. He was taken to a psychologist because of delayed speech and difficulty communicating. He attended an inclusive school and was placed in a pre-elementary class because unable to attend elementary school lessons. At school, he was often failed to complete his assignments. He had to go home longer than usual and stay alone in class to complete his assignment. Beside went to school, he also went to therapy every two times a week for 1.5 hours. In addition to speech therapy, he also learned to read and write. While working on an assignment at therapy, he needed a lot of encouragement and assistance to stay focused and do his work until complete. While at home, he refused when the nanny asked him to study. He preferred to spend his time playing an iPad or watching television. It made his parents worried and concerned about this behavior because it would difficult for him to enter elementary school, considering he had been seven years old.

According to Burrows (2004, in Dieringer, 2012), to reach their full potential in an educational setting, children with ASD can need early intervention. Children with ASD need prompting so they can pay attention to the lesson, engage with the material and assignments, and stay focused to complete their tasks (Gioni, 2015). Based on the results of some studies, the behavior modification approach was found to be effective in improving on-task behavior and dealing with problem behavior in children with ASD. Various techniques are used to improve on-task behavior in ASD children such as self-monitoring (Hoff & Doepke, 2006; Holfied, Goodman, Hazelkorn, & Helfin, 2010); modeling (Washburn, 2006; Bucalos, 2013); textual prompt (Greenberg, Tang, & Tsoi, 2010); visual and verbal prompt (Conroy, Asmus, Sellers, & Ladwig, 2005); reinforcement (Callahan & Rademacher, 2009), response cost and token economy (Tiano, Fortson, McNeil, & Humphreys, 2005; Fiksdal, 2014).

In this intervention program, the techniques used are duration shaping, prompting, and positive reinforcement techniques (token economy) to increase the duration of sitting behind the desk behavior and doing assigned tasks or showed on-task behavior. Shaping can be defined as the formation of new behaviors (on-task behavior) by providing continuous reinforcement of these behaviors, and by the extinction of previous behaviors (off-task behavior) so that new behaviors would appear (Martin & Pear, 2013).

According to Martin and Pear (2013), the duration shaping technique is efficient enough used to increase the duration of new behavior gradually. Also from several studies, it is known that the use of reinforcement is useful for increasing on-task behavior in ASD children. One of them was conducted by Callahan and Rademacher (2009) on 8-year-old children with ASD, which showed an increase on-task behavior proportion from 57% to 85%. The token economy technique was chosen in this program by considering that R had a good enough reasoning ability, especially for concrete stimulus or which is practical. It was expected that by using the token economy, he could understand that certain behavior would follow by certain consequences. In addition, the use of visual and verbal prompts is a useful technique used to reduce repetitive behavior in children with ASD. Conroy, Asmus, Sellers, and Ladwig, (2005) succeeded in reducing the repetitive behavior exhibited by children with ASD at school by using visual prompts to indicate the time when the child was allowed and not allowed to show the behavior. At the end of the program, it was expected that R could be accustomed to maintaining his attention while studying at home without distracted with other activities that are not related to his task.

## METHOD

### *Current Behavior*

The current behavior was the behavior that occurs at this time on the client, the behavior of sitting quietly and doing tasks (on-task behavior) with a duration that ranges between 2-3 minutes per day when R learns at home.

### *Target Behavior*

The target behavior is the final target behavior and became the goal of the intervention program. The target behavior in this program was the behavior of stay on the chair doing the task (on-task behavior) for 15 minutes each time the study session. This consideration was chosen because R needed to practice getting used to sitting and focusing on doing his tasks (on-task behavior) at home so that he could also apply it at school.

### *Behavioral Function Analysis*

Based on an analysis of the results of parent and caregiver interviews and child observation, the duration of R's on-task behavior was minimally influenced by R's disinterest in paper and pencil assignments (e.g., writing, drawing, coloring, copying, counting) and reading assignments (spelling the word). Other causes of interference came from the environment, which was more attractive to him, such as televisions, iPads, laptops, and printers; the learning situation was considered an unpleasant situation because it is full of demands; and a high need for visual sensory stimulus. So far, these three things had been overcome by R with showed the behavior of not stay on the seat quietly so that he can obtain what he wants (e.g., avoiding the task, being able to do other activities that are more enjoyable, free from pressure or demands, and the need of sensory stimulus are met). The nanny and parents also tended to allow him to do other activities and did not force him if he already looked unable to sit quietly. The following was an analysis of R behavior:

**Table 1. Behavior Analysis (Antecedent-Behavior-Consequence Model)**

<b>Antecedent</b>	<b>Behavior</b>	<b>Consequences</b>
More interested in other activities (watching videos on iPad / laptop, watching TV, playing with a printer)	Did not sit still doing the task ( <i>off-task behavior</i> )	Could do more desirable activities

### *Baseline*

Baseline implementation was carried out to determine the duration of quiet sitting behavior while doing tasks at home carried out by R. The baseline implementation was carried out by direct and indirect assessment. The indirect assessment was used through the interview method, while the direct assessment was done through observation. Through interviews and observations, the examiner explores and identifies stimuli, behaviors or conditions (antecedents) that hinder or support the success of the program. Things that are liked by R that can be used as reinforcement in the form of activities (watching iPad, playing sand, painting with finger paint), and snacks (wafers, biscuits, potato chips, juice box). Also, he has high demand or obsession with ceiling fans and printers. It can be used as a token material such as a sticker or a picture card of the two objects. From the results of a study by Carnett et al. (2014), the use of an object of obsession as a token can improve work performance in children with ASD and is proven to improve the effectiveness of interventions given.

Observation recording was done by using the continuous recording method. In this method, the recording is done all the time by noting how long the on-task behavior appears each time R does a learning activity. During the observation, the program compiler records the frequency and duration of R behavior to stay on task. In addition, the researcher will also record the frequency of prompts (verbal and gesture) given during R's work. Observation results show that the ability to stay on task lasts an average of 3 minutes before off-task behavior appears. While the average total number of prompts displayed R for 15 minutes is 44 prompts or about three prompts per minute.

**Table 2. Baseline Data**

<b>Day</b>	<b>Duration of <i>on-task</i></b>	<b><i>Verbal Prompt</i></b>	<b><i>Gestural Prompt</i></b>	<b><i>Total prompt</i></b>
1 <sup>st</sup> day	2 minutes 31 seconds	24	22	46
2 <sup>nd</sup> day	2 minutes 18 seconds	23	20	43
3 <sup>rd</sup> day	2 minutes 24 seconds	20	21	44
<b>Average</b>	<b>2 minutes 24 seconds</b>	<b>22</b>	<b>21</b>	<b>44</b>

### *Behavior Modification Techniques*

The techniques that be used in this intervention program were duration shaping, prompting, and positive reinforcement techniques. Shaping is the formation of new behaviors (on task) gradually by providing reinforcement every time the client successfully shows behavior that is close to the desired target behavior (Martin & Pear, 2013). Gradually, R would be asked to study (reading, writing, coloring, counting) with a duration that increases each day gradually. Every R successfully reached the target. He would get reinforcement in the form of a token economy. He would get one token in the form of a printer or ceiling fan every time R reaches its target. At the end of each session, R could exchange the tokens for prizes that have been determined. The choice of back up reinforcement was a choice of activities favored by R and objects or foods that were preferred by R.

In the implementation of the program, to help R continue to display on-task behavior, the program implementer would provide prompting. Types of prompting that will be used are verbal and gestural prompting. Verbal prompting was given first because it was in the form of verbal warnings and more comfortable for children to understand (for example calling the name R). Verbal prompting would be replaced by gestural promptings, such as hand signals or pointing at the clock/stopwatch as a signal for R to sit down to do his work. While studying, the researcher will also use a timer (alarm) to help R pay attention to the duration of the study.

He could stop if the alarm rang. In this program, giving a prompt was limited to the maximum number of gifts, and the amount would be reduced in each session until R only requires a maximum of 2 prompts to be able to complete the task. The goal was that he could be more independent in carrying out tasks with minimal assistance from the people around him

In all sessions, R was also asked to conduct self-control and self-monitoring of the duration of his learning behavior. He was expected to exercise self-control by refraining from playing other things or getting out of his seat before the learning activities were completed following the targets set. As for self-monitoring, R was expected to be able to monitor the tokens he gets. Also, the researcher provides regulations in the family before implementing the program to minimize outside interference. The rules that must be applied are:

1. While studying, R sits in a chair, behind his desk
2. Do not turn on the television during the intervention
3. Keep iPad away from R reached (in the storage box)
4. Do not give items that would be used as rewards for R during the intervention carried out.

Since the intervention session began, parents and caregivers were also expected to provide social reinforcement to R, such as giving praise, touching, and smiling when he successfully displays behavior on target without crying and screaming. After the behavior settles, the researcher would reduce the number of verbal prompts and gestural prompts when he would learn (fading) and eliminate tokens. Furthermore, the researcher would replace the token with just social reinforcement so that the behavior on the task can be settled.

#### *Implementation plan*

##### *Pre-session*

The program conducted for six days consisting of 6 sessions. Duration each session varies from 9 minutes to 15 minutes, depending on the duration of the target behavior in the session and the duration of reinforcement. Before the first session of program implementation, the examiner guided nanny as a program implementer, as well as to parents as supporters of the program's success. The researcher conducted roleplaying sessions to show how to implement the program before the nanny executed session 1. The researcher also explained what prompts could be given and the maximum number of prompts that can be given for a specific duration of time. The researcher counted the number of prompts given by the nanny during the session or trial by using the observation checklist. If the number of prompts given by the nanny had reached the maximum number that might be given, then the researcher would show a red card to the nanny. It meant she was no longer allowed to give a prompt in any form to R while working on the task until the alarm sounds. When the researcher felt that the nanny was ready, a new program implemented under the supervision of the researcher. After that, the researcher provided feedback and evaluation regarding the implementation of the program that had been carried out.

##### *Session*

At the beginning of each session, R was notified that he would get a picture card every time he does his job successfully until the alarm sounds. At the end of the session, R could exchange the cards with a backup reinforcer based on the cards' number he got. For example, in the first session, the researcher conveyed this instruction to R:

"R, if you succeed in doing your task until the alarm ring, you will get a picture card like this (showing the card to R). If you get one card, then you can choose one food/drink, if you can

get two cards, you can choose to play with finger paint for 15 minutes, and if you get three cards, you can play with kinetic sand for 30 minutes. "

Reinforce food or beverage was his favorite food/drink. While the other two reinforcements were introduced by the researcher when building rapport with him. The activity turned out to be R's favorite activity and had a high value to motivate him so that eventually, it was chosen to be a reinforcer. Starting from the baseline stage, two activities (playing with finger paint and kinetic sand), begin to be withdrawn from him and no longer showed by the researcher until the intervention program begins. That aim was to increase the value of the reinforcer and prevent the loss of the value of the reinforcer so that it can no longer motivate individuals to do something to get it (Martin & Pear, 2013).

**Table 3. The Intervention Session Program**

Session	Target of duration	Number of trials	Number of tokens each session	Prompt was given (Maximum)	Back up reinforcers and Number of Token to Redeem
1	3 minutes	3	3	9	0 token = get nothing 1 token = choice snack/ juice 2 token = Playing with finger paint (15 minutes) 3 token = Playing with kinetic sand (30 minutes)
2	6 minutes	3	3	7	Same with session 1
3	9 minutes	2	2	5	0 token = get nothing 1 token = Playing with finger paint (15 minutes) 2 token = Playing with kinetic sand (30 minutes)
4	12 minutes	1	1	3	0 token = get nothing 1 token = Playing with kinetic sand (30 minutes) *In this session, there is no trial. This change was done because of considering delay gratification ability of the child. The reward need immediately given
5	15 minutes	1	1	2	In the 5 <sup>th</sup> session, the child to collect token until the 6 <sup>th</sup> session.
6	15 minutes	1	1	2	0 token = get nothing 1 token = Playing with finger paint (15 minutes) 2 token = Playing with kinetic sand (30 minutes) This had the purpose of reducing reinforcement (fading reinforcement)

### *Evaluation*

Quantitatively and evaluation of the duration of behavior on task is carried out on R. Evaluation was done in sessions 3 and 6. The researcher (intervention designer) made a direct observation of R's behavior. If he failed to meet the target, an evaluation of the causative factors would conduct. Determination of the evaluation schedule was chosen based on the timeframe that was not too far from each session so that it was still possible if necessary changes are made. If it turns out that he was challenging to meet the target, further analysis was needed to choose a more appropriate behavior modification technique.

## Follow Up

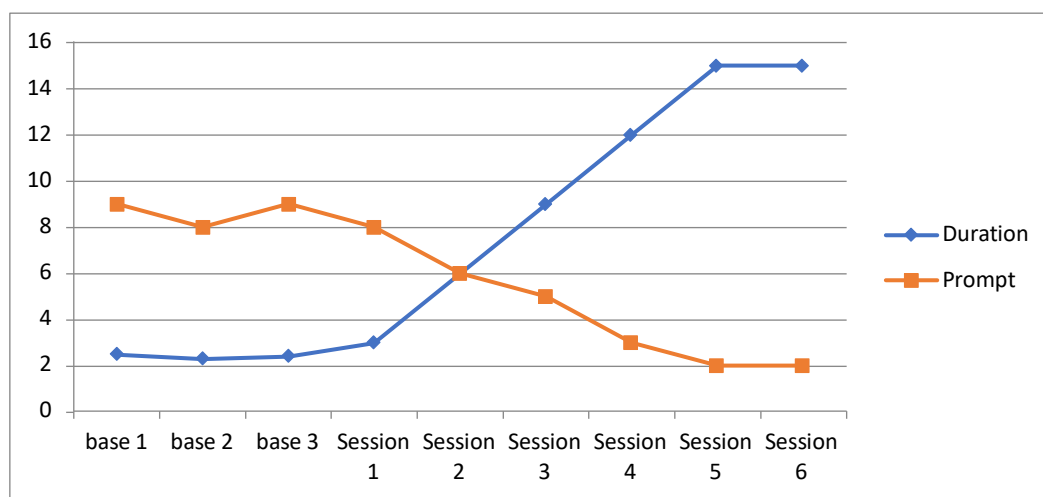
Follow up is done one week after the behavior modification program is complete. It aims to see whether the duration of on-task behavior decreases or increases after the program finishes. The time was chosen to see the consistency of R behavior so that it could be seen patterns of behavior after the program finishes. Follow up will be done through interviewing the nanny and direct observation when the nanny accompanied R studied and did the same recording method as when taking the baseline or when the program was run.

## Results

In general, there was increasing in the duration of R's behavior to stay on task. Also, the number of prompting (verbal and gestural) given to direct R to sit quietly and complete the task was reduced. The following graphs the duration of learning and the number of prompting given to R during the implementation of the behavior modification program throughout six sessions:

**Table 4. Duration of On-Task and the Number of Prompting Used During Intervention**

Session	Target Duration	Accomplishment	Maximal prompt	Verbal prompt	Gestural prompt	Prompting Total	Prompting Average
1	3 minutes	Success	9	4	3	7	8
	3 minutes	Success	9	5	4	9	
	3 minutes	Success	9	5	2	7	
2	6 minutes	Success	7	4	2	6	6
	6 minutes	Success	7	3	2	5	
	6 minutes	Success	7	5	2	7	
3	9 minutes	Success	5	3	1	4	5
	9 minutes	Success	5	4	1	5	
4	12 minutes	Success	3	2	1	3	3
5	15 minutes	Success	2	1	1	2	2
6	15 minutes	Success	2	2	0	2	2



**Figure 1. The Increase of On-task Duration and the Decrease of Prompt Frequency**

## DISCUSSION

The success of this intervention was influenced by external and internal factors of the child. The external factors referred to are first, the willingness of nanny to carry out the program seriously. Nanny undergo agreements that had been made, obey each rule, and could be trained

to reduce verbal instructions that demand. Nanny could also be directed to ignore children's stories and questions that are not related to the assignment during the learning session.

The second external factor was the condition of the learning environment. R appeared to be more optimal and successfully stays on task when the environment was well-conditioned, and the rules were communicated. He was better able to learn with an environment that is minimal interference and kept away from things that attract his attention (iPad, toys, television) during the study time. In addition, the appropriate size of chairs and tables also make R more focused and not move much freely. Short but clear verbal instructions could also help R to display on-task behavior.

In addition to external factors, the child's internal condition is also very influential. R's motivation to get playing sand with the researcher and the nanny was very high, so he was very trying to stay on task. This game was previously stored and not played by R, so it has a high value to increase motivation in R. The selection of reinforcement was also important because the right reinforcement can significantly increase children's motivation (Martin & Pear, 2013). Reinforcement also had benefits for R because it also helped train R's sensory, where he also has problems related to sensory touch, which tends to seek sensation.

However, verbal and gestural prompting still needed R until the end, especially for reading tasks. It means that R still needs supervision when he learns to ensure that he remained focused on doing the task. It needs to be considered because, in the future, not every learning session, he would get a mentor or teacher who can remind himself to keep on task at any time (for example, at school). In addition, the prompt given by the nanny when learning during the session aims more to correct the work of R. The nanny also gives less appreciation of the R effort verbally. In the future, the correction should be given at the end of the learning session, and when R displays on-task behavior, the nanny can give praise to increase the motivation to learn on R.

## CONCLUSIONS

Based on the data obtained, it could be concluded that the on-task behavior modification program effectively increases the duration of the on-task on R by five times from the baseline. The intervention technique used, duration shaping succeeded in extending the duration on task R. However, verbal and gestural prompting still needed R until the end, especially for reading tasks. In the future, when designing a program using behavior modification, it should also notice the fading of prompting technique effectively until the end the prompting is not needed. Also, it should add more sessions to maintain the new behavior. These addition sessions also can design to do fading of prompting and reinforcement.

## REFERENCES

- Adkins, K. B. (2000). Effects of structured work systems on task performance in children with autism. John Wesley Powell Student Research Conference, (2).
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing
- Boyd, B. A., Odom, S. L., Humphreys, B. P., & Sam, A. M. (2010). Infants and toddlers with autism spectrum disorder: Early identification and early intervention. *Journal of Early Intervention*, 32(2), 75-98. DOI: 10.1177/1053815110362690



- Bucalos, J. I. (2013). Increasing independence in children with autism spectrum disorders using video self-modeling. *Electronic Theses and Dissertations*. Paper 171.
- Callahan, K. & Rademacher, J. A. (2009). Using self-management strategies to increase the on-task behavior of a student with autism. *Journal of Positive Behavior Interventions*, 1 (2).
- Carnett, A., Raulston, T., Lang, R., Tostanoski, A., Lee, A., Sigafoos, J., & Machalicek, W. (2014). Effects of a perseverative interest-based token economy on challenging and on-task behavior in a child with autism. *Journal Behavior Education*, 23,368–377. DOI: 10.1007/s10864-014-9195-7
- Conroy, M.A., Asmus, J.M., Sellers, J.A., & Ladwig, C.N. (2005). The use of an antecedent-based intervention to decrease stereotypic behavior in a general education classroom: A case study. *Focus on Autism and Other Developmental Disabilities*, 20 (4), 223-230..
- Dieringer, S. M. (2012). The use of music to increase task-oriented behaviors in preschool children with autism spectrum disorders in a gross motor setting. *Dissertation*. Ohio State University.
- Doyle, B. T., & Doyle I. E. (2004). *Autism spectrum disorders from A-Z: Assessment diagnosis and more*. Arlington, TX: Future Horizons, Inc.
- Fiksdal, B. L. (2014). A comparison of the effectiveness of a token economy system, a response cost condition, and a combination condition in reducing problem behaviors and increasing student academic engagement and performance in two first grade classrooms. *Theses, Dissertations, and Other Capstone Projects*, (343).
- Goodyear-Brown, P. (2009). Theraplay approach for children with autism spectrum disorders. In E. Munns, (Eds), (2009). *Applications of family and group theraplay* (pp. 69-80). USA: Rowman & Littlefield Publishers.
- Gould, M. (2015). Using Ipads to increase on-task behavior of students with autism. *Theses and Dissertations*, (511).
- Greenberg, J. H., Tang, M., & Tsoi, S. P. Y. (2010). Effects of a treatment package on the on-task behavior of a kindergartener with autism across settings. *Behavioral Development Bulletin*, 10.
- Hoff, K. E. & Doepke, K. J. (2006). Increasing on-task behavior in the classroom: extension of self-monitoring strategies. *Psychology in the Schools*, 43(2).
- Holifield, C., Goodman, J., Hazekorn, M., & Heflin, L. J. (2010). Using self-monitoring to increase attending to task and academic accuracy in children with autism. *Focus on Autism and Other Developmental Disabilities*, 25(4) 230 –238.
- Leekam, S. R., Prior, M. R., & Uljarevic, M. (2011). Restricted and repetitive behaviors in autism spectrum disorders: A review of research in the last decade. *Psychological Bulletin*, 137(4), 562-593. DOI: 10.1037/a0023341.
- Martin, G., & Pear, J. (2013). *Behavior modification: What it is and how to do it* (9th ed.). Boston: Pearson Education, Inc.
- Tiano, J. D., Fortson, B. L., McNeil, C. B., & Humphreys, L. A. (2005). Managing classroom behavior of head starts children using response cost and token economy procedures. *JEIBI*, Volume 2, (1)
- Washburn, M. (2006). Using social stories to teach on-task behavior and participation skills with children on the autism spectrum. *Thesis*. Rochester Institute of Technology

# The Role of Psychological Capital on Job Stress of Nurses

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## Abstract

The nurses often experience fatigue, both physically and mentally, in serving patients. It may cause them to experience stress. This study was quantitative research, which aims to empirically analyze the influence of psychological capital on job stress based on the theory of psychological capital. The subject of this study was 100 nurses at Dr. Achmad Mochtar Bukittinggi Hospital. The results showed that there was a negative and significant psychological capital influence the work stress of nurses. The results of the analysis showed that there is a psychological capital effect on work stress with R square = 0.086 and a significance level = 0.003 (<0.05). It shows that psychological capital contributes 8.6% to work stress, while 91.4% is determined by other variables not examined in this study.

**Keywords:** *Psychological capital, job stress, nurses*

## INTRODUCTION

One of the most needed health workers and has a very important role in providing health services is a nurse. The services of nurses can measure the quality services provided by a hospital to their patients (Kozier, Erb, Berman, & Snyder, 2010). In Indonesia, the number of nurses in hospitals is higher compared to other health workers, which is 49% compared to general practitioners, specialists, pharmacy, midwives and dentists (Indonesian Health Ministry, 2017). Nurses are health workers who have graduated from nurse education. They are responsible and authorized to provide nursing services independently and can collaborate with other health workers according to their authority.

Nurses play a role in the delivery of health services. They have a very heavy duty because, as the right hand of the doctor, they also determine the success of work. In this case, nurses who have a duty in inpatient installations take a heavier workload than nurses who serve outpatients. Asi (2013) describes that they play an important role in providing services in hospitals and directly involved with patients and their families for 24 hours straight.

Nursalam (2002) explained that the duties and responsibilities carried out by inpatient nurses were physical and mental. Physical duties and responsibilities such as lifting the patient, making the patient's bed, and pushing the gurney. Mental tasks are the complexity of the work in the form of skills, responsibility for healing patients, caring for the family, and must establish communication with patients. Related to the task, Lumintang et.al (2015) stated that nurses often experience fatigue. This fatigue is in the form of physical and mental fatigue. It is caused by the number of complaints from patients treated. Not only in terms of patients, fatigue in nurses is also caused by many demands from the patient's family. This fatigue can cause stress. On the other hand, the limited number of nurses compared to the number of patients may cause

fatigue at work because the patient's need for nursing care is more than they can be provided. Hence, it can make nurses vulnerable to job stress. Munandar (2001) argued that the nursing profession is one of the jobs that have a high potential for stress because of their workload and responsibility. It will trigger someone to get angry, reduce concentration, and feel physical reactions such as headaches and lazy to work.

Schaufeli and Bakker (2004) reported that nurses had ranked first with the most stress among health professionals and social workers; about 43% of nurses experience job stress. Nurses experience higher stress levels compared to other health professions, such as doctors and pharmacists. Sasanti and Shaluhiah (2016) reported a survey of the Indonesian National Nurses Association in 2006 that around 50.9% of nurses working in Indonesia experienced work stress and often felt dizzy, tired, unable to rest due to workloads that were too high and time-consuming, low salaries without adequate incentives.

Beer and Newman (1978) defined job stress as a situation wherein job-related factors interact with the workers to change (i.e., disrupt or enhance). Their psychological and/or physiological condition are forced to deviate from normal functioning. This definition also serves to define "employee health", namely, a person's mental and physical. Furthermore, Beer dan Newman proposes six facets of job stress. One of which is human consequences facets. The human consequences have as its elements all aspects (positive and negative) of physical and mental health, which may be divided into three categories: physical or physiological, psychological, and behavioral.

The factors that cause a person to experience job stress are environmental, organizational, and individual factors (Robbins, 2006). In dealing with job stress, an individual must have the ability. Psychological capital is one of the variables related to this. Psychological capital is a state of positive psychological development in individuals with the characteristics of self-efficacy in all tasks, optimism, hope, and the ability to survive and move forward when faced with a problem (Luthan, Youssef & Avolio, 2007). Research conducting by Avey, Luthans, and Jensen (2009) in 416 workers with different occupational backgrounds found that there was a significant negative relationship between psychological capital and work stress.

This study aims to determine how much the contribution of psychological capital to nurse's job stress.

## **METHODS**

The data were collected using a quantitative method. The sample in this study is 100 nurses in an inpatient installation of RSUD Dr. Achmad Mochtar Bukittinggi (intern unit = 35 subjects, VIP unit = 20 subjects, surgical unit = 34 subjects, lung disease= 11 subjects). There were 89 female nurses and 11 male nurses as research subjects. The selection of this unit is based on the assumption that nurses in the unit have a high workload because of the high number of patients compare to other units. The medical record data showed that the rooms with the highest number of patients are in four units, namely the surgical, pulmonary, VIP, and internal. The number of patients treated in 2015 in the surgical room was 3,313 patients, 3,227 in the intern, 1,128 in the VIP, and 1,274 in the lung disease.

This study measures psychological capital as independent variables toward job stress as the dependent variable. The Psychological Capital Questionnaire (PCQ) by Luthans (2007) was used to measure the psychological capital, which consists of 20 items ( $\alpha=0,887$ ). Meanwhile, the job stress questionnaires were develop based on Beer dan Newman (1978). This job stress questionnaire measures human consequences facet of job stress. The questionnaires consist of

25 items (rix=0,852). Meanwhile, to process the research data, the researchers used a simple regression analysis.

## RESULTS

The result of the research is indicated in Table 1.

**Tabel 1. Simple regression test results**

Variable	Coefficient linearity	B	Significan ce (P)	R square
Psychological capital Job Stress	76.546	-.276	0.003	0.086

Table 1. showed that the R square is 0.086. It can be interpreted that psychological capital contributes 8.6% to job stress on nurses. It can also be seen that there is a negative influence of psychological capital on job stress, and the regression equity is  $y = 76.546 - .276x$ . Furthermore, this study also obtained a quantitative description of the two variables. The categorization of psychological capital and job stress can be seen in Table 2-5.

**Tabel 2. Categorization of Psychological Capital**

Categorization	Number	Percentage
High	64	64%
Medium	36	36%
Low	0	0%

**Tabel 3. Psychological Capital Categorization of Each Unit**

Unit	High (%)	Moderate (%)	Low (%)	Total (person)
Intern unit	57%	43%	0 %	35
VIP unit	55 %	45 %	0 %	20
Surgical unit	68 %	32 %	0%	34
Lung disease unit	100 %	0 %	0 %	11

**Tabel 4. Categorization of Job Stress**

Categorization	Number	Percentage
High	0	0%
Medium	83	83%
Low	17	17%

**Tabel 5. Job Stress Categorization of Each Unit**

Unit	High (%)	Moderate (%)	Low (%)	Total (person)
Intern unit	0 %	94 %	6 %	35
VIP unit	0 %	80 %	20 %	20
Surgical unit	0 %	80 %	20%	34
Lung disease unit	0%	64 %	36 %	11

In the psychological capital categorization, there were 64 subjects (64%) of the research in the high category, 36 subjects (36%) were in the moderate category, and no subjects were in a low category. Table 3 shows that 83 subjects (83 %) were in the moderate category, and 17 subjects (17%) were in the low category, and no subjects were in the high category.

In the psychological capital categorization, there were 64 subjects (64%) of the research in the high category, 36 subjects (36%) were in the moderate category, and no subjects were in the low category. Table 4 shows that 83 subjects (83 %) were in the moderate category, and 17 subjects (17%) were in the low category, and no subjects were in the high category. Table 3 and 5 showed the psychological and job stress of each unit, where psychological capital and work stress categorizations of nurses were almost the same in four inpatient units.

One way ANOVA is used to examine differences in job stress levels in variations of age and level of education and the results can be seen in Table 6 and 7.

**Tabel 6. Differences in Job Stress in Terms of Age**

<b>Variabel</b>	<b>F</b>	<b>Sig. (p)</b>
Job stress and age	2,429	0,032

**Tabel 7. Differences in Job Stress in Terms of Level of Education**

<b>Variable</b>	<b>F</b>	<b>Sig. (p)</b>
Job stress and level of education	3,678	0,029

The one-way ANOVA test results in tables 6 and 7 show that there are differences in the work stress of nurses in terms of age ( $p = 0.032$ ) and nurse's education level ( $p = 0.029$ ).

## DISCUSSION

In this research, the result shows that there is a significant negative influence on psychological capital variables on job stress. It indicates that higher psychological capital will cause lower job stress. Avey, Luthans, & Jensen (2009) explained that Psychological capital could be a resource for preventing job stress on workers. Furthermore, they state that psychological capital may turn out to be one of the critical resources that Lazarud and Folkman (1984) said were needed for employees to cope with stressful events or conditions at work.

This research is supported by research conducted by Liu et al. (2012), which gets the result that there is the influence of psychological capital on reducing job stress to prevent depression in physicists. Another research by Demir, S (2018) found that psychological capital has negatively correlated with stress, anxiety, and burnout on teachers. According to this research, psychological capital reduces stress, anxiety, and burnout of teachers. They can attribute positive meanings to their stressful work experiences and get positive work outputs by using stress with the help of their positive psychological capital competence.

The role of psychological capital to work stress can be explained through several components that exist in Psychological capital, namely self-efficacy, optimism, hope, and resilience. Self-efficacy is a person's belief in the ability possessed in directing all efforts to be successful and manage the task at hand (Stajkovic & Luthans, 1998). Mahdizadeh, Jamileh, et al. (2016), in their study, used the nursing staff of affiliated hospitals of Semnan University of Medical Sciences in as participant Iran in 2015-2016. The results of the study showed that 62.7% of the

nursing staff who had not self-efficacy, had mild job stress and between the levels of job stress and self-efficacy of the participants was significant.

Optimistic is a way to interpret positive events as things that happen as a result of oneself and interpret negative events as a result of things outside of yourself and occur in certain situations (Luthans et.al, 2007). Stressful conditions will also be reduced if the individual has an attitude of optimism, where the attitude can direct his thoughts on positive actions or build positive expectations that can overcome obstacles or problems being experienced.

Hope is commonly used in everyday language, but within the context of positive psychology has a specific meaning with substantial theoretical support. Hope is defined as a “positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals). In other words, hope consists of both willpower (individuals' agency or determination to achieve their goals) and "way power" thinking (being able to devise alternative pathways and contingency plans to achieve a goal in the face of obstacles). (Avey, Luthans, & Jensen (2009).

Resilience is the “developable capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” is arguably the most important positive resource to navigating a turbulent and stressful workplace (Luthan in Avey, Luthans, & Jensen, 2009). Tugade & Fredrickson (2004) found that resilient individuals can effectively cope with stressful experiences, whereas others facing similar conditions do not fare as well. Resilient individuals may recognize the benefits that positive emotions have on negative emotion regulation. The research indicates that resilient individuals are better equipped to deal with the stressors in a constantly changing workplace environment.

Yet, the influence of psychological capital on job stress is only 8.6%. This contribution is not too large in value. It can be inferred that many other factors play a role in reducing work stress on nurses. Haybatollahi (2009) has concluded from several previous studies that most of the variables that have been reported to be determinants of the work stress process in the nursing profession are three general categories: (1) personality dispositions, (2) situational characteristics, and (3) social support. Thus, to reduce nurses' stress levels, it is not only enough to increase their psychological capital but also consider variables as mentioned.

In addition, in this study, the majority of subjects were female nurses. These 89 subjects were female, and 11 subjects were male. As a worker, the woman also has more roles and responsibilities as a mother and wife. It can cause conflict between the roles. Dual role conflict may be one of the factors that can affect job stress on the woman. As Almashitoh (2011) reported toward 120 inpatient nurses working in one private hospital in Yogyakarta, shows that the contribution of dual role conflict and social support in predicting job stress is 40%.

The results showed that there were 83 nurses with moderate stress, and 17 people with low-stress levels, while none of the nurses experienced high levels of stress. It means that nurses are still not fully capable of managing internal and external demands related to work conditions. Meanwhile, 64 nurses have high psychological capital and 36 nurses with psychological capital in the medium category, and no nurses were in the low category. It means that in general, research subjects have positive psychological capital that can reduce stress at work.

Other results indicate that there are differences in stress levels in nurses with differences in age and education level. In this study, the subjects were mostly age 26-40 years with a moderate stress category. It is in line with Revalicha and Samian's (2012) research on nurses working at Dr. Soetomo in Surabaya that there is a relationship between age and work stress in nurses, nurses aged <40 years experience more work stress compared to those aged > 40 years

## CONCLUSIONS

Psychological capital has a negative influence on job stress on nurses. It means that an increase in psychological capital on someone can make the level of job stress on someone will be reduced. The contribution of psychological capital to job stress on nurses in this study was not too high. Many other variables might contribute to job stress, such as social support or dual role conflict, where the research subjects were 89% female nurses. Meanwhile, the results of the study showed that most nurses had job stress in the medium category and psychological capital in the high category.

Future researchers are expected to examine other variables that may have a greater contribution to the level of job stress on nurses, not only internal factors but also simultaneously external factors. Researchers can also use the experimental method.

## REFERENCES

- Almasitoh, ummu.H. 2011. Stres kerja ditinjau dari konflik peran ganda dan dukungan sosial pada perawat. *Jurnal psikologi islam (JPI)*, 8(1), 63-82.
- Asi, Sri Pahalendeng. (2013). Pengaruh iklim organisasi dan burntout terhadap kinerja perawat RSUD dr. Doris Sylvanus Palangka Raya. *Jurnal aplikasi manajemen*, 11(3), 515-523.
- Avey, J.B, Luthans. F. & Jensen. F.M. (2009). Psychological capital: a positive resource for combating employee stress and turnover. *Human resource management*, 48(5), 677-693.
- Bheer, T.A & Newman. J.E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. *Personnel Psychology*, vol.31, 665-699.
- Demir, S. (2018). The relationship between psychological capital and stress, anxiety, burnout, job satisfaction, and job involvement. *Eurasian Journal of Educational Research*, 75, 137-154, DOI: 10.14689/ejer.2018.75.8
- Haybatollahi, Sayyed Mohammad. (2009). *Work Stress in the Nursing Profession An Evaluation of Organizational Causal Attribution*. Helsinki, Yliopistopaino : University of Helsinki Department of Social Psychology
- Kementrian Kesehatan RI. (2017). Info Datin “Pusat Data dan Informasi Kesehatan Kementrian dan Kesehatan RI”. Jakarta : Pusat Data dan Informasi.
- Kozier. (2010). *Fundemental keperawatan konsep, proses dan praktik*. Jakarta: penerbit buku kedokteran EGC.
- Luthans, Freud., Avolio, B. J., Avey, J.B. & Norman, S.M. (2007). Positive Psychological Capital: Measurement and Relationship With Performance and Satisfaction. *Personal Psychology*, 60(3), 541-572.
- Lumintang, P, Kumat. K, & Mulyadi. 2015. Perbedaan tingkat stres kerja perawat instalasi gawat darurat dan unit rawat inap di rumah sakit pancaran kasih gmim manado. *Ejournal keperawatn (e-kep)*, 3(1), 1-6.
- Liu, l., Chang, Y., Jialian, F., Wang, J. & Wang, L. (2012). The mediating role of psychological capital on the association between occupational stress and depressive symptoms among Chinese physicians: a cross-sectional study. *BMC Public Health*.
- Mahdizadeh, Jamileh., Daihimfar, Faezeh., & Kahouei, Mehdi. (2016). The relationship of job stress with self-efficacy among nurses working in hospitals of Semnan University of Medical Sciences, Iran. *Biosci. Biotech. Res. Comm.* 9(3): 435-483
- Munandar. (2001). *Psikologi Industri dan Organisasi*. Depok: Universitas Indonesia Press.

- Nursalam (2002). Manajemen Keperawatan : Aplikasi dalam Praktik Keperawatan Profesional Edisi 1. Jakarta : Salemba Medika
- Rabenu, Edna and Yaniv, Eyal (2017). Psychological Resources and Strategies to Cope with Stress at Work. *International Journal of Research. Int.j.psychol.res*, vol.10(2) 8-5, 2017
- Robbins, Stephen. P. (2006). Perilaku Organisasi Edisi Bahasa Indonesia. Jakarta: PT. Indeks Kelompok GRAMEDIA
- Sasanti, Serafina Damar dan Shaluhiah, Zahroh. (2016). Personality Berpengaruh terhadap Terjadinya Stress Kerja Perawat di Ruang Rawat Inap Rumah Sakit Umum Kota Salatiga. *Jurnal Promosi Kesehatan Indonesia. Jurnal Promosi Kesehatan Indonesia. Vol. 11 / No. 1 / Januari 2016.*
- Schaufeli, W.B. & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Behavior*, 25(3), 93-315.
- Stajkovic, A.D & Luthans, F. (1998). Social cognitive theory: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamic*, 26.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.



# Being a Parent: A Study Among the Mothers of Juvenile Sexual Offender

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## Abstract

The number of sexual abuse cases is increasing, especially those committed by teenagers. The teenagers who have been involved as perpetrators of sexual abuse have shown very complex behavioral problems, so the parents of these teens have questioned their parenting abilities, especially their beliefs as a parent in the future. Parental belief about their competence as a parent is known as parental self-efficacy. This study aims to describe parenting self-efficacy among the mothers of juvenile sexual offenders. In-depth interviews have been used for data collection, and a purposive sampling technique was used to select the subject. The results indicated the subjects did not believe in their parenting competence, especially in the domain of discipline, achievement, and nurturance. On the other hand, the show parenting self-efficacy in the domain of health and recreation. In addition, the mother's perceptions of socio-marital support affect their belief in parental competence.

**Keywords:** *Parenting self-efficacy, mother, juvenile sexual offender*

## INTRODUCTION

The use of the internet has significantly increased, which contributed to the increased number of teenagers who use social networking services, especially on mobile phones and computers (Chan, McNeil, Binder, 2016). Indonesian Internet Service Providers Association (2017) reported that teenage user is about 75.5%. It shows how close the internet is to every aspect of teenagers' life, with positive and negative consequences. On the positive side, the internet has supported information processing in terms of acquisition and exploration. Furthermore, the internet is useful for establishing and expanding connections, improve knowledge, and increasing mobility.

At the same time, all of these facilities also have disadvantages and can be harmful if misused by an irresponsible person. For instance, the internet is often used as media for pornographic content (Okwuchukwu, 2014). Longe dan Longe (2005) reported that children (7-18 years old) had been exposed to pornography due to the high rate of internet usage. Markey & Markey (2010) found that around 25% of the keyword from the search engines were related to pornography. Issues regarding pornography in adolescents is not a new case that has just appeared. Exposure to media containing pornography increases the risk of brain damage, which can lead to sexual related addiction, strong sexual desire, and dysfunctioning sexual problems (Anisah, 2016). Children who have exposed to pornography from an early age will have a high possibility of becoming perpetrators of sexual violence (Naidoo, Vishanthie, & Sewpaul, 2014).

According to KPAI (2017), in recent years, violence cases against children have been a concern in the community, which is dominated by sexual violence cases. Sexual violence is domination

and exploitation through sexual activity (Maltz, 2002). The perpetrators of sexual violence are not only adults but also can be done by adolescents. Adolescents' sexual offender is a person around 15-16 years who commits sexual offenses against other individuals, such as rape, penetration, exhibitionism, intercourse, oral and genital contact, also genital fondling (Prisco, 2015). In addition to exposure from pornography, the other factors that can influence adolescents to become perpetrators of sexual violence are having experienced sexual abuse, a history of criminality in the family, the not conducive situation at home, delinquent peers, and witness or experience physical exploitation (Burton & Meezan, 2004).

In general, family dysfunction is the main feature found in adolescents who commit sexual violence (Martin and Pruett, 1998). Although the adolescent itself decided against committing sexual violence, the family, especially parents, has a significant influence on shaping a child's behavior (Worling & Curwin, 2000). The parental role will determine children's current condition, including self-control and the development of positive behavior in the future. As stated by Gottfredson and Hirschi (1990), the level of self-control can explain the reasons behind criminal acts, such as sexual violence.

Adolescence is a transition period in the development stage, which involves physical, cognitive, emotional, and social changes (Papalia, Olds, and Feldman, 2009). Especially, fulfilling the parenting task towards adolescents who involved in sexual violence cases is a tough challenge for parents. Therefore, to address these challenges, parents, especially mothers of the juvenile sex offender required to have self-competence. One of the competencies that are essential for optimizing the quality of parenting in the challenging condition is parents' internal beliefs about their parenting ability (Coleman & Karraker, 1997). Bandura (2009) defined parental beliefs as parenting self-efficacy. This belief influences their feelings, the way they think and behave also motivates them to carry out the parenting responsibility.

Coleman and Karraker (2000) define parenting self-efficacy as parents' estimation toward their parenting competencies and their ability to assist children's development positively. Parents who have parenting-efficacy will be more responsive to their child's needs, display good coping strategies, be directly involved in interactions with children, and can influence children's behavior effectively and positively (Coleman & Karraker, 2005; Jones & Prinz, 2005). On the other hand, parents who do not feel satisfied with their parenting competencies tend to focus on difficulties, high autonomic arousal, feelings of helplessness as parents, and use punishment to discipline the child.

Parents with a higher level of parenting self-efficacy must have sufficient knowledge about child care, which is appropriate for the child's age, and also appropriate measures to achieve this goal (Coleman & Karraker, 1997). In addition, they are also required to have confidence in the ability to carry out parenting tasks, belief that children respond well to them, and the belief that other people involved in parenting being supportive of their efforts. Coleman and Karraker (2000) proposed five domains of parenting self-efficacy, namely: (1) discipline domain which refers to parents' belief about their capability to handle the issues related to discipline and how to modify children's behavior; (2) achievement domain which includes parents' belief about their ability to promote the child's academic achievement; (3) recreation domain explains parents' belief in providing recreation activity and develop children social competency; (4) nurturance domain refers to parents' belief toward their capability in giving emotional support and encourage the kids' emotional development; (5) health domain explains parents' belief in their ability in maintaining the kids' health, which is preventive and corrective.

The study by Bor & Sanders (2004) indicated that parenting self-efficacy increases would contribute significantly to preventing the re-emergence of the child's behavior problems in the

future. Meanwhile, according to Trunzo (2006), the effectiveness of treatment for children with conduct disorder is indirectly related to parenting self-efficacy and parenting competencies. So while giving treatment to children, it would also be better for providing intervention to parents as well. This intervention is provided to increase parenting skills, which are good predictors for parenting self-efficacy. Furthermore, Perrone, Sullivan, Pratt, and Margaryan (2004) showed that low-level of parenting self-efficacy with troublesome peers have a significant effect on juvenile delinquency.

Together, these studies indicate that parenting self-efficacy is important to fulfilling parenting tasks in children with behavioral and developmental problems. Besides, it can also be a predictor of successful treatment. Although these investigations reported many interesting results, the self-efficacy of the juvenile sexual offender's parent, especially the mothers, has not been thoroughly investigated. The responsibility and the duty as a mother will increase. It will help the mother to encourage children to get through problems and deal with their self, like questioning their mistakes as a parent. The present study attempts to describe parenting self-efficacy among the mothers of juvenile sexual offenders.

## **METHODS**

This research uses a qualitative research design and uses a phenomenology method in the form of interpretation parenting self-efficacy among the mother of juvenile sexual offenders. This research used one data source that is mothers as a participant. The sample participant were five mothers of the adolescent sexual offender. They have different educational backgrounds, from junior high school graduates to nursing graduates. An in-depth interview with an unstructured qualitative interview is used in this research. The researchers have done informal observation by observing the participant in the interview session and their daily life.

Firstly, these data were organized and given a systematic code. After that, data were extracted to find keyword and coding. The next step is grouping the same keywords to themes and analyzed the similarities and relationships between the themes. The last step is research finding is reviewed based on theories.

## **RESULTS**

The result of this study showed that participants were not good enough as parents, especially after their children became perpetrators of sexual violence. They felt a failure and have no confidence as parents. One of the mothers decided to quit her job to focus on doing a job as a parent. In addition, one of the participants gave up and cannot deal with children's behavior and wants to leave home.

Parenting self-efficacy among the mothers of adolescent sexual offenders are described from 5 parenting domains. In general, mothers showed their difficulty in carrying out the parenting of the five domains. However, there are two parenting domains, which are health and recreation domains, that they are still confident about their responsibility. In the domain of health, mothers feel confident in maintaining their children's health. They can provide healthy food, avoid illness, and take care of when the children sick. However, some participants have a different approach to teach children to live clean and healthy and provide adequate nutrition.

## **DISCUSSION**

Participants have different educational backgrounds, junior high school graduates, and nursing graduates. It has affected subject beliefs related to this phenomenon. The participant with a lower educational background have no prior knowledge of nutritional needs and cannot give a

good example to live healthy for the children. As Zimmerman, Woolf, and Haley (2015) mentioned that people with higher education get the opportunity to learn about health and health risk factors not only from the curriculum or educational institutions, but they also tend to live, work, and study in a healthy environment. They can get information related to lifestyles, such as diet and physical activity or exercise. Zevalkink and Riksen-Walraven (2001) argued with a higher educational background, parents will be able to provide environmental security, stimulus in the home environment, and maintain nutritional intake.

Meanwhile, from the recreation domain, the participants also feel confident in fulfilling recreational activities. One of the participants feels this is important for her child to avoid stress, such as visiting tourism sites and having lunch at the restaurant or cafe. However, this is not routinely done for economic reasons. King, Law, King, Rosenbaum, Kertoy & Young (2003) argued that recreation is difficult to provide for families from the middle to lower economies. It is because the family should spend money on admission, transportation, daily needs. Hence, children will get limited recreation activities. Even though they do not routinely provide recreational activities, they do not consider this as a problem. It is because they believe that recreation is not a primary need for children. Dalaman & Livyaiz (in Zarei & Yektayar, 2016) stated families with lower middle economic status do not pay attention to how they spend free time well with their children because of limited time and money. They also busy working parents. Therefore, although they believe that they can provide recreational activities with children, in reality, they have problems and are not provided regularly.

Zarei & Yektayar (2016) mentioned recreation or entertainment for adolescence can provide opportunities for some social experience and to enter the community so that they can learn how to be responsible in the future. This recreation domain is actually not the only that related to providing opportunities to go outside together but also how parents can develop children's ability to interact with people around them. Before the case, participants allow their children to interact with people around them, but after the incident, the children have limited social interaction, especially friends who they considered not good. It makes the mother become overprotective because of her lack of confidence in supervising child relationships outside the home.

Meanwhile, for the next three domains, the mothers showed their uncertainty to carry out parenting in the domains of achievement, nurturance, and discipline. The case of sexual abuse committed by their children makes them dropped out of school. Indeed, the participants have expected the children to continue their education. They have tried their best to find the school, but no school wants to accept their children. This is because of limited information for the parent on how to deal with children who committed a crime. Parents get confused and don't know who to consult with regarding their child's education. Mothers also feel uncertain that they can help children get the right educational institutions and provide academic facilities and activities when children are at home, such as presenting tutors or directly involved in teaching children. As stated by Coleman and Karraker (2005), one of the factors that influence parent beliefs is the availability of information relating to the values of child parenting, and the development of their children during a residential community can affect parenting self-efficacy. On the other hand, they have faced the fact that their children began to lose their interest or motivation in continuing school so that they faced difficulties in convincing and giving reinforcement so that they would continue to go to school. Greenwood (2008) stated that children who are involved in juvenile delinquency would be up against some risks such as drug abuse, teenage pregnancy, and dropping out of school. This also happened to children in this research. They were drop out of school when they were still in the first grade of junior high school even though they had not yet received a decision from the trial.

The participants also didn't believe that they were able to provide a nurturance domain. During this time, they did not recognize the emotions of their children and difficult to express emotions or affections to their children. Manap, Idris, Zahrin, and Ali (2016) stated that affectionate children, especially from their mothers, would make them grow and develop more positively. It is supported by Manap (2013) that children raised by mothers who are full of affection tend to have high self-esteem and academic achievement. The relationship between mother and child is also less warm. The child will share his story with his mother if he is asked, one child in this research stated that he prefers to tell his father than his mother. The things above are a description of the lack of role of nurturance that mothers have for their children. How children perceive parental care they receive will influence the formation of risky behavior in adolescents such as drug abuse, intoxication/drunken, and sexual abuse or sexual harassment. A child's perception of parenting is related to feelings of acceptance, warmth, attachment, and nurturance. (Schwartz, Zamboanga, Ravert, Kim, Weisskirch Willimas, Bersamin & Finley, 2009). In this study, participants' children felt that they did not get attention from their mothers. The participants admitted that he was angry and made a gap with his mother. The child describes the mother's figure as a hostile figure, so they are afraid to share their experiences or stories. The results of the study found that children who tell their mothers about behavioral problems can reduce the risk of children engaging in juvenile delinquency (Roche, Ensminger, & Cherlin, 2007).

The discipline domain is also a domain that is not believed by the participants will be able to be done for their children. During this time, the mother upheld discipline by scolding, hitting children or other objects, and shouting. The child depicts the mother's figure as an angry figure. Mothers feel that the child doesn't seem to listen to what they say. Parents who experience high levels of stress and excessive anger show a reduced level of parenting self-efficacy (Coleman and Karraker, 2005). This pattern of care is closely related to behavioral problems in children, such as the presence of conduct disorder, depression, low self-esteem. The results of the study state that strict discipline from parents will influence aggressive behavior, especially boys (Chang, Schwartz, Dodge, McBride-Change, 2003). The research subjects also did not believe that what they were doing was right, but when their children made mistakes, they did not know of other ways to overcome them. This lack of knowledge is something that can affect low parenting self-efficacy because they do not know the right techniques for disciplining children (Coleman and Karraker, 2005).

In addition, they also feel they cannot do daily routines and enforce rules at home. It can be seen from the application of inconsistent rules such as using a cellphone or going to an internet cafe. In addition, children did not assign to certain responsibilities such as learning schedules and when they should back home. In consequence, children spend more time playing outside the home. The application of consistent discipline in adolescents will help the children to avoid the negative influence because they have values and norms in the family (Marshall & Chassin, 2000). Bandura (1989) mentioned among the factor that influences expectations of task achievement is a personal achievement, whether parents succeed in modifying their children's behavior or not. When modifications are successful, they will tend to feel competent in carrying out parenting tasks. In other words, they have parenting self-efficacy. So far, the mother's efforts to make changes to the child's negative behavior have been less successful. It can be seen from the children still doing things that have been prohibited by the mother.

Based on the explanation of the results of the above studies, it is known that, in general, the participants lacked confidence in carrying out the parenting function. They do not feel confident even though these beliefs tend to vary or. These differences can be caused by socio-marital support, which means that there is a role for the couple to provide emotional support

and attention. Where, this affects the belief with the mechanism of social persuasion or feedback given by the couple related to overcoming various difficulties in parenting (Coleman and Karraker, 2005). In addition, parents who are busy doing their work can also affect parenting self-efficacy. Eccles and Harold's research (in Hoover-Dempsey & Sandler, 1997) busy at work, and lack of parental involvement in parenting can reduce parents' self-confidence in their competence. Therefore, it can be concluded that the husband's support and busy at work can affect the variety of beliefs felt by mothers who have teenage children who commit sexual violence.

## CONCLUSIONS

Parenting self-efficacy has an important role for parents to carry out parenting tasks, especially for mothers. The presence of parenting self-efficacy builds their beliefs and feel efficacious doing parenting tasks. The role of a parent more is expected while children are facing problems to improve the child's behavior. This research showed that parenting self-efficacy of mothers whose children are sexual offenders is they feel incompetent about how to carry out parenting tasks. This case made they are questioning their parenting competence. Besides, they don't found another better way how to apply parenting techniques for their children.

Based on the parenting self-efficacy domain, there are two of five domains that parents believe about their competence and feel efficacious, these are health domain and recreation domain, although they are not fully believed. Meanwhile, they don't feel efficacious in another domain, such as achievement, discipline, and nurturance, particularly after this case. There are differences between a mother's belief about competence in parenting. It depends on the perceived socio-marital support of the mother.

## REFERENCES

- Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology*, 25 (5), 729—735.
- Bahyeh, Zarei, Mozafar, & Yektayar. (2016). Examine the Relationship of Socio-Economic Status (SES) with leisure time spending of girls emphasizing sporting activities. *European Journal of Physical Education and Sport Science*, Vol 1, No. 3.
- Burton, D. L., & Meezan, W. (2004). Revisiting recent research on social learning theory as an etiological proposition for sexually abusive male adolescents. *Journal of Evidence-Based Social Work*, 1(1), 41-48.
- Bor W, & Sanders M. R. (2004). Correlates of self-reported coercive parenting of preschool-aged children at high risk for the development of conduct problems. *Australian and New Zealand Journal of Psychiatry*. 38:738–745.
- Chang, L., Schwartz, D., Dodge, K. A., & McBride-Chang, C. (2003). Harsh Parenting in Relation to Child Emotion Regulation and Aggression. *Journal of Family Psychology*, 17(4), 598-606. <http://dx.doi.org/10.1037/0893-3200.17.4.598>
- Coleman, P.K., & Karraker, K.H. (1997). Self-efficacy and parenting quality: Finding and future applications. *Developmental Review*, 18, 47—85.
- Coleman, P.K., & Karraker, K. H. (2000.) Parenting self-efficacy among mothers of school-age children: Conceptualization, measurement and correlates. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 49 (1), 13—24.
- Coleman, P.K., & Karraker, K.H. (2005). Parenting self-efficacy, competence in parenting, and possible links to young children's social and academic outcomes. Dalam Saracho, O.N.,

- & Spodek, Bernard (Ed). Contemporary perspectives on families, communities, and schools for young children. United States: IAP.
- Dombrowski, S. C., LeMasney, J. W., Ahia, C. E., & Dickson, S. A. (2004). Protecting Children From Online Sexual Predators: Technological, Psychoeducational, and Legal Considerations. *Professional Psychology: Research and Practice*, 35(1), 65-73. <http://dx.doi.org/10.1037/0735-7028.35.1.65>
- Eneman M. (2006). Digital Child Pornography: Reflections on the Need for a Critical IS Research Agenda. In: Berleur J., Nurminen M.I., Impagliazzo J. (eds) *Social Informatics: An Information Society for all? In Remembrance of Rob Kling*. HCC 2006. IFIP International Federation for Information Processing, vol 223. Springer, Boston, MA.
- Eric J. Chan, Dale E. McNiel and Renee L. Binder. (2016). Sex Offenders in the Digital Age. *Journal of the American Academy of Psychiatry and the Law*, 44 (3), 368-375.
- Gillian King, Mary Lawm, Susanne King, Peter Rosenbaum, Marilyn K. Kertoy & Nancy L. Young. (2003). A Conceptual Model of the Factors Affecting the Recreation and Leisure Participation of Children with Disabilities. *Journal Physical & Occupational Therapy In Pediatrics*, 23:1, 63-90, DOI: 10.1080/J006v23n01\_05
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Greenwood, Peter. W. (2008). Prevention and Intervention Programs for Juvenile Offenders. *The future of children*, 18, (2), 185-210.
- Hoover-Dempsey, K.V., & Sandler, H. M. (1997). Why do parents become involved in their children's education?. *Review of educational research*, 67 (1), 3—42.
- Jones, T., & Printz, R. (2005). Potential roles of parental self-efficacy in parent an child adjusment: A Review. *Clinical Psychology Review*, 25 (3), 341—363.
- Longe, Folake. A & Longe, Olumide. B. (2005). The Nigerian Web Content: Combating pornography using Content Filters. *Journal of Information Technology Impact*, Vol. 5, No. 2, pp. 59-64.
- Maltz, W. (2002). Treating the sexual intimacy concerns of sexual abuse survivors. *Sexual and Relationship Therapy*, 17(4), 321-327.
- Manap, Jamiah. (2013). Parenting skills: Exploring the success stories of Ibu Mithali's parenting style and nurturance of their children. Tesis Doktor Falsafah, Universiti Islam Antarbangsa.
- Manap, Jamiah., Idris, Fazilah., Zahrin, Syaidatun N.A., Ali, Zuraidah. (2015). How do mothers nurture love via parenting? *Journal Psikologi Malaysia*, Vol. 2 (2)
- Markey, Patrick M & Markey, Charlotte N. (2010). Changes in pornography-seeking behaviors following political elections: an examination of the challenge hypothesis. *Journal Evolution and Human Behavior*.
- Marshal, Michael & Chassin, Laurie. (2000). Peer Influence on Adolescent Alcohol Use: The Moderating Role of Parental Support and Discipline. *Applied Developmental Science - APPL DEV SCI*. 4. 80-88. 10.1207/S1532480XADS0402\_3.
- Martin, Earl & Marsha Kline Pruett. (1998). The juvenile sex offender and the juvenile justice system. *The American Criminal Law Review*, 35: 279-332.
- Naidoo, L & Sewpaul, V. (2015). The Life Experiences of Adolescent Sexual Offenders: Factors That Contribute to Offending Behaviours. *Journal Social Work/Maatskaplike Werk*, Vol 51. 2.
- Okwuchukwu, Okafor G. (2014). Pornography and Child Safety on the Internet. *International Journal of Humanities Social Sciences and Education (IJHSSE)*. Volume 1, PP 69-78 ISSN 2349-0373 (Print) & ISSN 2349-0381 (Online).
- Papalia, D.E., Olds, S.W. and Feldman, R.D. (2001) *Human Development*. 8th Edition, McGraw Hill, Boston.

- Perrone, D., Sullivan, Christopher. J., Pratt, Travis. C & Margayan, S. (2004). Parental Efficacy, Self-Control, and Delinquency: A Test of a General Theory of Crime on a Nationally Representative Sample of Youth. *International Journal of Offender Therapy and Comparative Criminology*.
- Prisco, Robert. (2015). Parental Involvement in Juvenile Sex Offender Treatment: Requiring a Role as Informed Supervisor. *Family court review an Interdisciplinary Journal*.
- Roche, K. M., Ensminger, M. E., & Cherlin, A. J. (2007). Variations in parenting and adolescent outcomes among African American and Latino families living in low-income, Urban areas. *Journal of Family Issues*, 28(7), 882-909. DOI: 10.1177/0192513X07299617
- Schwartz, Seth. J., Zamboanga, Byron. L., Ravert, Russell. D., & et al. (2009). Perceived parental relationships and health-risk behaviors in college-attending emerging adults. *Journal of Marriage and Family*, 71(3), 727-740.
- Trunzo, Annette Catharine. (2006). Engagement, Parenting Skills, and Parent-Child Relations as Mediators of the Relationship Between Parental Self-Efficacy and Treatment Outcomes for Children with Conduct Problems. Doctoral Dissertation, University of Pittsburgh. (Unpublished)
- Worling, James. R & Curwen, T. (2000). Adolescent sexual offender recidivism: success of specialized treatment and implications for risk prediction. *Journal Child Abuse & Neglect*, 24 (7), 965-982.
- Zevalkink, J., & Riksen-Walraven, J.M.A. (2001). Parenting in Indonesia: Inter- and intracultural differences in mothers' interactions with their young children. *International Journal of Behavioural Development*, 25(2), 167-176
- Zimmerman, E.B., Woolf, S.H., & Haley, A. (2015). Understanding the relationship between education and health: a review of the evidence and an examination of community perspectives. Agency for Healthcare Research and Quality; Rockville



# The Impact of Work Engagement to Individual Performance Among Team Member Programme AIESEC Andalas University

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## Abstract

Performance is usually associated with how individual achievement of established assessment standards. Based on these achievements, the role of *work engagement* is needed, which is the encouragement motivation of organizational success and the predictors in determining individual performance. The purpose of this study was to determine the effect of *work engagement* on the performance of Team Members Program (TMP) AIESEC Andalas University. The research method used is a quantitative method with a sampling technique is the saturated samples of 79 people at the 2015/2016 management at the AIESEC Andalas University. *Work engagement* measurements were carried out using the UWES (Utrecht Work Engagement Scale) that are consisting of 16 items with reliability of 0.871, and the individual performance measurements were measured by the results of *Performance Appraisal* (PA) AIESEC Andalas University. The results of the research prove that the *work engagement* influence the individual performance on the members of the TMP AIESEC Andalas University have ( $p < 0.05$ ) with the value of  $R^2$  as big as 0.83 shows that the contribution of the *work engagement* influences the individual performance is 83%. Based on this matter, that the research hypothesis is accepted.

**Keywords:** *Work engagement, individual performance, team member*

## INTRODUCTION

Research Works Partnership for Workplace Mental Health Journal 2009 states that an organization or company is said to be successful if the Human Resources (HR) has goals that are aligned with the organization or company (Attridge, 2009). The function and role of HR are needed to maximize the performance, productivity, and effectiveness through efficient work methods so that it can produce the added value for the organization or company (Nawawi, 2000). Besides, the HR is also prepared to face the new challenges so that each organization or company becomes more competitive which includes; the financial upheaval, high-performance expectations, new technology, and the difference in the work values of a new generation in a company (Bakker, Albrecht & Leiter, 2015).

The challenges in the organization or company, are closely related to the problems that occur, one of which is the low individual performance. Bakker and Trietsch (2009) also stated that the performance is one of the biggest HR problems in organizations or companies today. If the individuals have poor performance, then what happens is the decline of the organization or company. It will also apply vice versa if the individuals are people who are diligent and happy

to innovate, then what happens is positive progress for the organization or company (Novianto, 2014).

The low performance of individuals occurs in various organizations, both profit-oriented and nonprofit oriented, which is produced during one period (Fahmi, Irham, & Yovi, 2010). Due to the Problems with the low performance have occurred in non-profit/social enterprise companies, namely the *International des Etudiants en Sciences Economiques et Commerciales* (AIESEC) organization. AIESEC is one of the largest social enterprise organizations in the world, global, non-political, independent, and run by young people aged 18-30 years (my.aiesec.net, 2014).

AIESEC has 4 main programs, and currently, the AIESEC has problems with the low performance in the *Team Member Program* (TMP), which is a program with the social work experience and is involved in practical skills development projects under the supervision of a leader.

This matter can be shown by the *Performance Appraisal* (PA) data, which is measured in each AIESEC management period, especially in the Andalas University branch of AIESEC. It shows the performance of Andalas University TMP AIESEC members from 2013-2014 to 2015-2016 tends to be dominated by the low performance or the low-level performance, then followed by the middle performance or the medium level performance. The most crucial problem of the low performance is in the management of 2014-2015, wherein this period the TMP members who had high performance only had a percentage of 1% in Q1 (first quarter) and 7% in Q3 (third quarter). It also happened in the 2015-2016 management in Q3 (third quarter), which only reached 7% in the high performance. The average performance of high-level individuals is under 50%. Besides, the comparison of the percentage of individual performance from year to year also tends to decrease.

Based on these data, it shows that AIESEC is experiencing problems with low individual performance. The low of the PA results in the Team Member Program (TMP) is becoming a concern for the Talents Management division of the AIESEC Andalas University. From the results of the survey, the TMP members acknowledged that they were less enthusiastic and excited about their work. It can be seen from the attitude of laziness, and often procrastinate the task. The TMP members also feel less able to concentrate fully on their work and often complain about what they do. The tendency of themselves who are less enthusiastic and less focused; this matter indirectly influences less of the optimization of working, which finally influences the performance results (Kahn, 1990).

The HR management to improve the individual performance of the company, besides to require the HR who have abilities above average on a cognitive basis, it also requires the HR who can invest themselves physically and emotionally in their work roles (Herbert, 2011). Therefore, the organizations or the companies should focus on the formal role of the positive performance of each individual, and later this is known as *work engagement* (Bakker & Laiter, 2010).

Work engagement is the latest issue that focuses on the positive side of HR, which sees a condition where individuals have positive thoughts and have high motivation to their work (Schaufeli & Bakker, 2003). These conditions include the physical aspects (vigor), the aspects of (dedication), and the cognitive aspects of (absorption).

The social enterprise companies in which there are business activities are highly demanded to have strong work engagement. The nonprofit system can be a challenge for the social enterprise companies so that the individuals who are always active and engaged with their work. Even though the individuals in it do not get the real salary or wages in fact, but still can achieve the

company targets that can be directly seen from the achievement of individual performance in the company's PA (Gunadi, 2016). It is supported by the discovery of a survey conducted by Gallup (2013), which explains that the employees are engaged or cannot be seen during the 6 months of working, then, it is making the company must find effective ways to manage the HR.

Next, the researchers interviewed the 14 AIESEC team leaders at Andalas University and also interviewed the 10 low-performing TMP members. The problem can be seen from the physical presence of the individuals who tend to below. It can be seen from the intensity of being late to the office tends to be high, often complaining, delaying the work, and not completing work on time. The individual presence is also emotionally being one of the problems in this matter. The TMP members feel their work is more monotonous, so it influences their enthusiasm for working. They are becoming less interested and less competitive with each other, they also do not work whole-heartedly, feeling less meaningful, so the bond between themselves and the work becomes less. Moreover, the presence of individuals is cognitively indicated also occurs. The TMP members often do not focus on issuing ideas. In the end, they seem unappreciative and do not care about the success of working in the company. It is inversely proportional to the behavior described by the individual who engaged in his/her work. A very clear engagement behavior is the effort made by the employees, such as working hard, trying to be fully involved in the work and focus on what they do by exerting all their energy (Schaufeli & Bakker, 2003).

The low work engagement makes a person less motivated by working and does not have the commitment, enthusiasm, and spirit. The statement is a variety of behavioral criteria that the individual is bound to work or not. This condition is certainly not an ideal condition for a worker during the many challenges faced to achieve organizational targets. This challenge is often faced by various organizations where low individual performance is caused by a lack of work engagement with their work (Albrecht, 2010).

Based on the explanation, the researcher is interested in conducting further research on how the influences of work engage with individual performance. Especially, at the AIESEC Team Member Program (TMP) of Andalas University, where the hypothesis proposed in this research is that there is an influence of work engagement on the performance of the Team Member Program (TMP) of the AIESEC Andalas University.

## **METHODS**

This research uses quantitative methods to examine a particular population with statistical data analysis, and the aim is to test a predetermined hypothesis. The variables researched where the individual performance as the dependent variable and work engagement as an independent variable. The subjects of this research involved all the members of the AIESEC Team Member Program (TMP) of Andalas University in the 2015-2016 administration year, which involved the 79 people. Measuring instruments to measure performance are obtained from the results of Performance Appraisal (PA) that is used by AIESEC Indonesia. PA is obtained from the average score derived from aspects of work results and competencies that are incorporated in an arrangement of Key Performance Indicators (KPI). They have been agreed together between leaders and subordinates. Moreover, work engagement is measured by using an adaptation scale from the Utrecht Work Engagement Scale (UWES) compiled by Schaufeli, Salanova, Gonzales Roma, & Bakker (2002). The method of data analysis in this research was carried out by a simple linear regression method.

## RESULTS

The hypothesis test results show that work engagement has a significant contribution to the performance of individuals with a value of  $p = 0.0000$   $p < 0.05$ . The alternative hypothesis (Ah) is accepted, that there are the influences of work engagement on the individual performance at TMP AIESEC Andalas University.

The regression equation obtained is  $Y = 12.299 + 0.808 X$ . This equation shows that there is a positive influence that states the average change in the variable Y for each change in variable X every one unit. This equation shows that the constant is 12.299, which means that if there is no increase in the value of the service quality variable (X), then the value of individual performance participation (Y) is 12.299. The regression coefficient of 0.808 means that if there is an increase in the value of work engagement, then the value of individual performance will increase by 0.808 on the value of work engagement. So, the higher the work engagement, then the higher the individual performance. Vice versa if the lower the work engagement, then the lower the performance of individuals.

Furthermore, the R2 (R-Square) is used to measure how much the proportion of the variation of the independent variables together in influencing the dependent variable. The results of the R2 value of 0.83, this means that the magnitude of the influence of the work engagement variable on individual performance at Andalas University's TMP AIESEC is 83%, while the remaining 17% is influenced by other variables outside of the research and research errors.

In this research, a description of the individual performance of TMP AIESEC Andalas University members is obtained at the following:

**Table 1. The Categorization of the Performance Appraisal**

Category	Range of Values	N	Percentage
Low	0-49	36	45%
Moderate	50-79	32	41%
High	80-100	11	14%
<b>Total</b>		<b>79</b>	<b>100%</b>

Based on the table above, the TMP AIESEC members who had low performance were 36 people (45%), 32 people (41%) in the moderate category, and the high categories were 11 people (14%). Furthermore, the description of the work engagement of TMP AIESEC members based on the mean and standard deviation of hypothetical scores can be categorized as follows:

**Table 2. The Categorization of Work Engagement**

Category	Formula	Raw Score	N	%
High	$X \geq (Mi + 1SD)$	$X \geq 74$	16	20%
Moderate	$(Mi - 1SD) \leq X < (Mi + 1SD)$	$28 \leq X < 74$	35	46%
Low	$X < (Mi - 1SD)$	$X < 24$	2	2%
<b>Total</b>			<b>79</b>	<b>100%</b>

In the table 2 above can be seen that 12 people (15%) of Andalas University TMP AIESEC members had a high work engagement, 52 people (62%) had a moderate work engagement, and 15 people (18%) had a low work engagement.

## DISCUSSION

The data processing of the research results using the simple linear regression test that proves the hypothesis of researchers that "There is an influence of work engagement on the performance of TMP AIESEC Andalas University's members." The results shows the regression test that is the value of  $p = 0,000$  ( $p < 0.05$ ). This result is following the previous research, which states that there is an influence of work engagement with individual performance (Maslach, 2001; Saks, 2006; Schaufeli & Bakker, 2010).

The influence of work engagement with individual performance has a positive direction with a correlation value of 0.913. It shows that the higher the work engagement, the higher the performance of individuals. It also applies vice versa, that is when the work engagement gets lower, then the lower of the performance of that individual. The concept is following what was stated by some experts who stated that there is a positive influence of work engagement on individual performance (Bakker & Bal, 2008; Imawati & Amalia, 2011).

Based on the value of regression contributions, it is known that the contribution of work engagement with the individual performance is 83%, while the remaining 17% is influenced by other variables that are not examined in this research. This result is supported by the previous research conducted by Safaria (2013) on the 35 respondents of the employees at PT/(Incorporated Company) Seascope Surveys Indonesia, with the results of the work engagement to contribute to the performance of 89.3% and 10.7% by other variables outside the X variable which is not examined. This research also shows that the work engagement is a predictor in determining the individual performance in an organization (Haid & Sims, 2009; Markos & Sridevi, 2010; Altunel, Kocak, & Cankir, 2015), and indirectly work engagement is also a main key of the business for the organizational success (Swarnalatha & Prasanna, 2013).

Work engagement behavior can be seen in the three aspects, including aspects of vigor (physical), dedication (emotional), and absorption (cognitive). The individuals with high physical work engagement can be seen from the willingness to make a hard effort, not easily tired, and persistent in facing the difficulties at work. Furthermore, emotionally, these individuals also do not feel compelled to do their jobs, because they feel their work gives meaning to themselves, and feel challenged by the work. Besides cognitive, individuals also concentrate fully and deeply. They feel the time passes fast and have difficulty leaving themselves from work, but that does not mean that they are addicted to their work, which results in the individuals are rarely feeling bored. Therefore, their work is completed on time (Schaufeli & Bakker, 2003). The explanation describes that the people who have a high work engagement will have good performance as well. It is closely related to what was stated by some experts who stated that the individuals who have good performance would be connected with their involvement in working both physically, cognitively, and emotionally. (Kahn, 1990; May, Gilson, & Harter, 2004; Saks, 2006).

Based on the results of descriptive analysis, the performance of TMP AIESEC members of Andalas University has different categories. Namely, the individuals who have low categories of 36 people (45%), 32 people (41%) in the moderate/medium category, and the high categories of 11 people (14%). Based on these data, it can be seen that almost half the members of the TMP AIESEC Andalas University have low performance. It shows that the AIESEC member of Andalas University has not been able to achieve the work standards that have been set by the organization.

Furthermore, the descriptive analysis was also carried out on the work engagement variable. The number of respondents in the low category is 15 people (18%), 52 people (62%) in the medium/moderate category, and as many as 12 people (15%) in the high category. The level

of work engagement in the TMP AIESEC members at Andalas University is more than half at the moderate level. It shows that the AIESEC Andalas University members have work engagement that is not yet optimal for their work (Schaufeli & Bakker, 2003). The researcher assumes that it is also supported by the AIESEC organizational system, which is a nonprofit organization. No compensation/profit is sharing with the individuals so that in doing the work, it requires volunteers from each member. It is following the opinion of experts that the compensation is also able to influence the involvement of individuals in an organization (Gibson, 1987). These conditions make the individuals have a level of enthusiasm that is not optimal, and the meaningfulness of the work they have done is not yet fully created.

## CONCLUSIONS

The result is expected to provide benefits for the scientific repertoire in industrial and organizational psychology, especially regarding the influence of work engagement on individual performance. The results of this study can also be a solution to improve individual performance at AIESEC and other nonprofit organizations. Furthermore, as a reference to face the challenges that exist in this organization. For further researchers who are interested in this research, the topic can conduct further research by involving the AIESEC branches or other social enterprise organizations. It is expected that further researchers will involve more research samples not only in the one management so that the results of the research can describe more clearly the influence between the variables researched.

## REFERENCES

- Albrecht, S. L. (2010). *Handbook of employee engagement perspective*, Issues. UK: MGP Books Group.
- Altunel, M., Kocak, O. E., Cankir, B. (2015). The effect of job resources on work engagement: A study on academicians in Turkey. *Educational sciences: theory & practice journal*, 1, 409-417.
- Attridge, M. (2009). Employee work engagement: Best practices for employers. *Research works journal*, 1, 1-12.
- Bakker & Bal. (2008). *Weekly work engagement and performance: A study among starting teacher (2010)*, 83, 189–206.
- Bakker, K.R., & Trietsch, D. (2009). *Principles of sequencing and scheduling*. John Wiley and Sons, New York: New Jersey.
- Bakker, B. A. & Leiter, M.P. (2010). *Work engagement: A handbook of essential theory and research*. New York: Psychology Press.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2015). Key questions regarding work engagement. *Reprint of European journal of work and organizational psychology* (2011), 20, 4–28.
- Fahmi, Irham. & Yovi. (2010). *Pengantar manajemen perkreditan*, Bandung : Alfabeta.
- Gallup. (2013). *State of the global workplace: Employees the engagement insight for business leaders worldwide*. New Jersey: Gallup, Inc.
- Gibson, James, L., et al. (1987) *Organisasi Dan Manajemen: Perilaku, Struktur, Proses*. Binarupa Aksara, Jakarta.
- Gunadi, J. (2016). *Perilaku Industri dan Organisasi*. Jakarta: Prasetya Mulya
- Haid, M. & Sims, J. (2009). *Employee engagement: maximizing organizational performance*. Philadelphia: Right Mangement Inc.

- Herbert, M. (2011). *An exploration of the relationships between psychological capital (hope, optimism, self-efficacy, resilience), occupational stress, burnout, and employee engagement*. Dissertation. University of Stellenbosch.
- Imawati & Amalia. (2011). Pengaruh budaya organisasi dan work engagement terhadap kinerja karyawan. *Journal of Occupational and organizational psychology*(2010),89,189-206.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 692-724.
- Markos, S., & Sridevi, M. S. (2010). Employee engagement: the key to improving performance. *International journal of business and management*. 5(12); December 2010.
- Maslach, C., Schaufeli, W. B., Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- May, Gilson, & Harter. (2004). *Human Resources*, UK: Cengage Learning.
- Myaiesec.net. (2014). AIESEC way. Jakarta: AIESEC Indonesia.
- Nawawi, H. (2000). *Administrasi personel untuk peningkatan produktivitas kerja*, Jakarta: Haji Intermedia.
- Novianto, T. (2014). *Evaluasi kinerja*. Jakarta: PT Unilever Indonesia Tbk.
- Saks, A.M. (2006). Antecedent and consequences of employee engagement. *Journal managerial psychology*, 21.
- Schaufeli, W. B., Salanova, M., Gonzalez -Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of happiness studies*,3 (1), 71-92
- Schaufeli, W.B., & Bakker, A.B. (2003). *UWES - Utrecht work engagement scale preliminary manual*. Netherland: Occupational Health Psychology Unit Utrecht University
- Safaria, S. (2013). Pengaruh keterlibatan kerja terhadap pegawai pada PT.seascape surveys Indonesia. *e-Jurnal Manajemen dan Bisnis, Vol 1, No. 1*.
- Swarmalatha, C., & Prasanna, T.S. (2013). Employee engagement. A theoretical view. *International journal of scientific research*. 2, 259-262.

# Parental Mediation and Excessive Internet Use Behaviour in Teenagers

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## Abstract

This study aims to examine the effect of parental mediation on excessive internet use in adolescents. Participants of this study were 327 adolescents aged 15-18 years (139 men, 188 women). Parental mediation and excessive internet use scales were used to measure these variables. This study used quantitative research methods. A simple linear regression analysis technique was used for data analysis. The results showed that there was an influence of parental mediation on the tendency of internet use behavior in teenagers, with an effective contribution of 21%. It shows that parental mediation influences the emergence of excessive internet use behavior in adolescents.

**Keywords:** *Excessive internet use, parental mediation*

## INTRODUCTION

The internet was first introduced to the world community through the International Computer Communication Conference (ICCC) in October 1972 and until now. Internet increasingly needed and used by people around the world (Pendit, 2003). Based on the Internet World Stats website (2016), internet users in the world reached by 3,675,824,812 users and especially in Indonesia, 132,700,000 per June 31, 2016.

The results of the Internet World Stats survey are in accordance with a survey conducted by the Indonesian Internet Service Providers Association (APJII, 2016). The number of internet users currently stands at 132.7 million, consisting of 52.5% male users and women by 47.5%. Based on age, the number of users aged 25-34 was 75.8%, followed by those aged 10-24 years with 75.5%, aged 35-44 by 54.7%, then age 45-54 by 17.2%, and the lowest percentage owned by users over the age of 55 by only 2%. Based on the results of the APJII survey, information obtained that internet users are dominated by teenagers and adults aged 10 to 34 years.

Smith (2004) states that there are several interests for adolescents in accessing internet services, such as the purpose of obtaining information knowledge and communication that is generally done is accessing through various online social media, which can trigger the emergence of excessive internet use behavior in adolescents. Vanea (2011) argues that excessive internet use is marked by the time spent doing internet use activities through chatting and online in the media (forums/groups/ blogs), social media networks, online shopping, uploading videos/photos, sharing activities and see a certain thing. In this case, the use of internet access is emphasized on the frequency of time of use.

Durkee, Kaess, Carlii, Parzer, Wasserman, & Floderus (2012) state that several factors influence overuse on the internet appears and environmental factors that also play a strong



predictor of the emergence of negative behavior towards the internet. Environmental factors related to the function and role of the family, namely the level of parental education, family situation, parental mediation, and the frequency of internet used by parents. Furthermore, Hedman, Gerhard, and Nils (2014) researched the role of parents in assisting children's activities in using internet services influenced by the interaction between parents and children. The interaction is a pattern of relationships between parents and children that aims to shape a prosperous family life by realizing family goals and the role of each family member. Livingstone and Helsper (2008) state that the interaction between parents and children in the activities of using and utilizing technological media is known as parental mediation.

Nathanson (2001) suggests the definition of parental mediation as a symbolic interaction that occurs between parent and child in the form of social products. Parents can mediate the use of the internet through discussions about media content that is accessed, and the child is involved in the conversation (active mediation), the provision of rules aimed at limiting media use, restrictions on time of use, location of use and content accessed (restrictive mediation), and parents are simultaneously present when the child uses the internet (co-viewing mediation).

Pontes, Szabo, and Griffiths (2015) suggested that the role of parents in mediating children's behavior in using media and technology can prevent negative effects on the media. However, prevention is also influenced by the individual himself in responding to and using media optimally and according to function. Kalmus, Blinka, and Olafsson (2015) also emphasize that there was a negative relationship between parental mediation and the problem of excessive use of teenage internet. Several previous studies have examined the behavior of excessive internet use in adolescents in various countries, such as Austria, Belgium, Bulgaria, Germany, Greece, Spain, France, Italy, Finland, Netherlands, Norway, Poland, Portugal, Slovenia, Chinese, English, Turkish and Korean (Blinka & Smahel, 2012; Lee et al., 2015; Li, O'Brien, Synder, & Howard, 2015). From these studies, there are mixed results regarding the description of Internet usage behavior in adolescents, such as duration of use, the purpose of access, distribution of demographic status, psychological variables related to the behavior, the role of the environment and family.

Based on these findings, it can be said that there are inconsistencies in the results of previous studies, as well as differences in several things, including policy regulations of each country, cultural factors, and education systems towards the emergence of internet user behavior. Thus, research on the behavior of internet use in adolescents needs to be done in Indonesia, to get an adequate picture of the topic that has differences with previous research in several developed countries, including the characteristics of the subject, cultural differences, developing country conditions, subject demographic status, etc. The hypothesis proposed in this study is that there is a relationship of parental mediation to the tendency of excessive internet use behavior in adolescents.

## **METHODS**

### *Participants*

The participants of this study were 327 people consisting of 171 high schools (SMA) students and 156 private high school students. Subject criteria are students who use the internet actively, live together with parents, and parents are also internet users. All subjects consisted of 139 (43%) men and 188 (57%) women.

## Instruments

The research data was collected using two scales, including the scale of internet use behavior and the scale of parental mediation. The scale of internet use behavior consists of 18 items compiled based on aspects raised by Griffiths (2005), namely salience, conflict, tolerance, withdrawal symptoms, and relapse. The scale is presented in the form of a Likert scale with 5 answer choices 'very unsuitable' to 'suitable' and has been tested for reliability ( $\alpha = 0.859$ ). The scale of parental mediation is measured by 12 items arranged according to three aspects proposed by Nathanson (2001), namely active mediation, restrictive mediation, and co-viewing mediation. The scale presented in the form of a Likert scale with 5 answer choices 'is very inappropriate' to 'suitable' and has been tested for reliability ( $\alpha = 0.864$ ). All scales and research procedures carried out have met the research ethics established by the Faculty of Psychology, Universitas Gadjah Mada. Participants are first asked to be willing to participate in the research by signing the consent form contained on the first page of the research scale. Research participants answered the scale voluntarily without being given any reward. The data obtained in this study were analyzed using simple linear regression analysis techniques.

**Table 1. Aspects of Instrument**

Scale	Aspects	Examples of item
Excessive Internet Use (EIU)	1. Salience	I prefer to be online compared to other activities
	2. Conflict	accessing the internet is more fun than doing homework
	3. Tolerance	without me knowing, I have accessed the internet for hours
	4. Withdrawal symptoms	I feel worried when the internet data package runs out
	5. Relapse	when it is offline, I want to go back to access the internet
Parental Mediation Scale	1. Active mediation	my parents explained the impact or danger of the internet
	2. Restrictive mediation	I am allowed to use the internet either on my cellphone/gadget or computer (PC) when I have finished school work
	3. Co-viewing mediation	my parents never knew what activities I did when accessing the internet

## RESULTS

The data in this study were analyzed using simple linear regression analysis techniques, which had been tested assumptions beforehand. In the following table 2, it is presented regarding the calculation of the results of the linear regression test on the two research variables.

**Table 2. Results of linear regression analysis**

Variable	<i>Unstandardized Coefficient</i>		<i>Standardized Coefficient</i>	t	Sig.
	B	Std. Error	Beta		
Constant	63.475	2.282		27.810	.000
Mediation parents in using internet	-0.863	0.093	-0.458	-9.285	.000

Based on the results of the regression analysis in table 2, it can be seen that the value of sig. 0.00 ( $p < 0.05$ ), which means that there is a significant influence between parental mediation on excessive internet use behavior in adolescents. The effective contribution of parental

influence on the tendency of excessive internet use behavior through the R-Square value is 0.21 (21%), which means that the parent mediation variable influences internet usage behavior by 21%, while other variables influence the rest.

## DISCUSSION

This study aims to examine the effect of parental mediation on excessive internet use in adolescents. The findings regarding the variable of excessive internet use behavior obtained in the subject of this study are included in the low category by 2.1%, the medium category by 69.1%, and the high category by only 28.7%. These findings indicate a mismatch of research results with the assumptions that have been put forward, and the previous literature is that there is a high score on the behavior of excessive internet use in adolescents. This assumption is supported by data obtained from APJII (2016), which shows that the number of teenage internet users (10-24 years) is 75.5% of the total number of users. Based on preliminary survey results which show that there is a tendency for high behavior excessive use of the internet in adolescents as seen from the amount of time of use. Previous literature also showed different results that subjects who were in adolescents (11-16 years old) were found, including excessive internet users in the high category (Skarupova, Ólafsson, & Blinka, 2015).

According to the researchers' analysis and supported by observations obtained during the data collection process, that such conditions occur as part of the existence of an error measurement, which in this case is more related to social desirability factors contained in the research subjects. Some things that support the existence of social desirability can be seen through the process of data collection conducted during class hours. When students fill out questionnaires, they still wear school uniforms that reflect school attributes and identities that require students to maintain the good name of the school. They showed positive behaviors when filling out the questionnaire accompanied by the teacher in the classroom and the lack of honesty and openness that is owned by the research subjects. These things become part that influences the findings of research that show that the behavior of excessive internet use, which is included in the high category, is only 28.7%.

The findings on the parent mediation variable showed that subjects with a low parental mediation category were 3.1%, the medium category was 91.7%, and the high category was 5.2%. Based on the observations of researchers obtained at the time of data collection, such conditions are supported by the lack of openness and honesty in the real subject and the lack of ability to assess the capacity of self against a given stimulus.

Hsu, Cheng, and Chiou (2003) suggest that excessive internet use is marked by the inability of a person to limit and manage the time of internet use either for any purpose. This inability is manifested in various activities, such as an increase in usage time, forget the purpose of access, and an increase in the need to continuously access the internet (Yang, Choe, Baity, Lee & Cho, 2005). According to the psychodynamic view, such a situation occurs because of interactions in various psychic aspects that work unconsciously (Corsini & Wedding, 2010). Corey (2005) said that in the unconscious various basic forces encourage individuals to behave and respond and bring up motivation (encouragement), emotions, and internal aspects that are the source of the emergence of certain behavior.

Suler (2004) argues that certain factors motivate a person to stay afloat and enjoy the use of the internet, and can also be free to release his true identity (anonymous), which is mentioned by the term (disinhibition effect). In neuroscience perspective, the pleasure arises when someone uses the internet is influenced by the release of the enzyme dopamine found in parts of the brain through the limbic and paralimbic systems. When someone feels something

pleasant, dopamine will be released and then decreased back to normal. In someone who uses the internet excessively, the amount of dopamine released by the brain multiplies more than the normal amount and causes work changes in the limbic system. The limbic system will form a new pattern where the pattern will get used to a very high level of pleasure (Han, Kim, & Renshaw, 2015).

The next finding is that the relationship between internet use behavior and parental mediation shows a significant relationship. The results of this study are supported by previous literature that parental mediation is a strategy that can be used by parents to control, supervise and understand media content accessed by children and adolescents (Liu, Fang, & Sun, 2006; Lwin, Stanaland, & Miyazaki, 2008; Mendoza, 2009; Morentin, Cortes, & Medrano, 2014). However, there are differences in the direction of the relationship between the two variables, including the positive constant value in this study indicates that the higher the level of parental mediation, the higher the level of internet use in adolescents. While previous studies showed a negative relationship between parental mediation variables and excessive internet use behavior in adolescents (Kalmus, Blinka, & Olafsson, 2015; Lee, 2012; Liu et al., 2006).

Limitations in this study include the demographic characteristics of the subject, administration of research instruments, and the process of data retrieval. The subjects in this study were students in which their parents were also internet users and included total internet usage in a day with four answer choices, namely less than four hours, four to six hours, seven to nine hours, and more than nine hours. Taking the subject with parents who also use the internet, aims to see the existence of parental mediation variables that are applied to children's internet use. However, when collecting data in the field, some subjects revealed that their parents' internet usage was limited to communication use, such as WhatsApp, BBM, Line, and various other chat applications. While parents do not understand other functions of the internet, good googling, youtube, downloads, and various other useful functions. It was discovered by researchers when conducting a brief interview with a research subject who revealed that although parents use the internet, they do not have sufficient knowledge about other functions of the internet.

The total internet usage used by the subject in a day aims to find out the amount of internet consumption of the subject. However, at the time of research data collection, some subjects were confused, hesitant, and even had difficulty determining the number of hours of internet usage in a day. This situation allows for the occurrence of bias in determining the number of hours of internet use by the subject. It can be overcome if researchers have certain tools, programs, and applications that can be used to calculate the amount of internet usage in a day so that it will help to get information about the amount of time of internet use with certainty and accuracy.

## **Implication**

There are several implications of this research, including those related to the design of approaches and the implementation of psychological interventions that can be carried out by technology, family, positive, and social psychology practitioners. They are expected to involve parental mediation and behavior towards internet use. It becomes one of the efforts to prevent and overcome the psychological impact and behavior deviations that occur due to the ineffective use of the internet.

The next implication is related to the role of parents who are expected to be able to implement parental mediation activities. It can be in the form of active mediation, restrictive mediation, and co-viewing mediation as an effort to prevent the emergence of excessive internet use

behavior in adolescent children. Then also related to the teacher as an educator gives a big role in the behavior of children's internet use and is expected to be a means for students to realize appropriate and effective internet usage behavior. It can be realized through the existence of several programs implemented by schools by providing training and outreach on the use of the internet and the impacts that can arise when using the internet excessively and inappropriately.

## CONCLUSIONS

The results of this study suggest an influence of parental mediation on the emergence of trends in Internet use behavior in adolescents. Mediation conducted by parents through active mediation (discussions about media content being accessed), restrictive mediation (restrictions on time of use, location, and content accessed) and co-viewing mediation (parents simultaneously present when children use the internet).

## REFERENCES

- Asosiasi Pengguna Jasa Internet Indonesia (APJII). (2016). *Profil Pengguna Internet Indonesia 2016*. Jakarta: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Blinka, L., & Smahel, D. (2012). Predictors of adolescents' excessive Internet use: A comparison across European countries. *Proceedings of the 15th European Conference on Developmental Psychology*, 337-342.
- Corey, G. (2005). *Teori dan praktek dari konseling dan psikoterapi*. Bandung: Refika Aditama.
- Corsini, R. J., & Wedding, D. (2010). *Current psychotherapies* (9th ed.). Canada: Thomson Learning.
- Durkee, T., Kaess, M., Carli, V., Parzer, P., Wasserman, C., & Floderus, B. (2012). Prevalence of pathological internet use among adolescents in Europe: Demographic and social factors. *Journal of Addiction*, 107, 2210-2222.
- Griffiths, M. D. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10, 191-197.
- Han, D. H., Kim, S. M., & Renshaw, P. F. (2015). Functional brain changes in response to the treatment of internet gaming disorder. In C. Montag & M. Reuter (Eds). *Internet addiction, studies in neuroscience, psychology, and behavioral economics* (pp. 77-91). London: Springer International Publishing.
- Hsu, Y., Cheng, Y. J., & Chiou, G. F. (2003). Internet use in a senior high school: A case study. *Journal Innovation in Education and Teaching International*, 40(4), 356-368.
- Internet World Stats. (2016, December 11). World internet users and population statistics. Retrieved from <http://www.internetworldstats.com/stats.htm>
- Kalmus, V., Blinka, L., & Olafsson, K. (2015). Does it matter what mama says: Evaluating the role of parental mediation in European adolescents' excessive internet use. *Journal of Children and Society*, 29, 122-133.
- Lee, D., Seo, J. Y., Lee, C. S., Park, C. S., Kim, B. J., Cha, B., & Lee, S. J. (2015). Allergic diseases, excessive Internet use, and suicidal ideation in Korean adolescents: comprehensive Psychiatry, 62, 100-104.
- Lee, S. J. (2012). Parental restrictive mediation of children's internet use: Effective for what and for whom? *New Media and Society*, 15(4), 466-481.
- Li, W., O'Brien, J. E., Snyder, S. M., & Howard, M. O. (2015). Characteristics of internet addiction/pathological internet use in the United States. University students: A qualitative-method investigation. *Plos one*, 10(2), e0117372.
- Liu, H., Fang, Q., & Sun, Z. (2006). An epidemiological study on adolescents' internet addiction in Jiangsu province. *Chinese Journal of School Doctor*, 20(4), 346-348.

- Lwin, M., Stanaland, A., & Miyazaki, A. (2008). Protecting children's privacy online: How parental mediation strategies affect websites safeguard effectiveness. *Journal of Retailing*, 84(2), 205-217.
- Mendoza, K. (2009). Surveying parental mediation: Connections, challenges, and questions for media literacy. *Journal of Media Literacy Education*, 1, 28-41.
- Morentin, J., Cortes, A., & Medrano, C. (2014). Internet use and parental mediation: A cross-cultural study. *Journal of Computers and Education*, 70, 212-221.
- Nathanson, A. (2001). Parent and child perspectives on the presence and meaning of parental television mediation. *Journal of Broadcasting and Electronic Media*, 45(2), 201-220.
- Pendit, P. L. (2003). *Perspektif perpustakaan perguruan tinggi di Indonesia* (Disertasi tidak terpublikasi). Universitas Indonesia, Jakarta.
- Skarupova, K., Ólafsson, K., & Blinka, L. (2015). Excessive internet use and its association with negative experiences: Quasi-validation of a short scale in 25 European countries. *Computers in Human Behavior*, 53, 118-123.
- Suler, J. (2004). The online disinhibition effect. *CyberPsychology and Behavior*, 7(3), 321-324.
- Vanea, M. O. (2011). Intensive or excessive use of internet ad risks of internet addiction among specialized workers – gender and online activity differences. *Journal of Procedia-social and behavioral sciences*, 30, 757-764.
- Yang, C. K., Choe, B. M., Baity, M., Lee, J. H., & Cho, J. H. (2005). Scl-90-r and 16pf profiles of senior high school students with excessive internet use. *Canadian Journal of Psychiatry*, 50(7), 407-414.

# Implementation of Competitive Memory Training (COMET) Module to Improve Self-Esteem in Adolescents Victims of Relational Bullying

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## Abstract

Female adolescents who experienced relational bullying in school will get their self-esteem affected. This low self-esteem condition is a contributing factor causing female adolescents to be re-bullied again. The purpose of this research is to implement the Competitive Memory Training (COMET) module to improve self-esteem's female victims of relational bullying. This study applied One Group Pre-Test Post Test Design with the subject of research were three female adolescents aged 13-15 years. COMET interventions were given in groups for 8 sessions as well as independent workout activities at home. The results show that the COMET module could be implemented on two subjects who experienced the same frequency and duration of relational bullying (<1 year) as indicated by the increasing score self-esteem of female victims of relational bullying both in global self-esteem and particularly in the close relationship dimension.

**Keywords:** *Relational bullying, self-esteem, adolescence*

## INTRODUCTION

Adolescent is an important phase. During this period, the position of friends becomes more important, which causes complicated friendship. Consequently, issues such as peer status and struggles for popularity can trigger prolonged conflicts that result in relational bullying in female adolescents. Relational bullying is an act of recurring aggression seen through the crime that aims and manipulates friend relationships that leads to social exclusion, spreading rumors, persuading others to ignore them (Wood, et al, 2003).

In early adolescence, nearly 30% of adolescents experience bullying with the high frequency and intensity that usually occurs in junior high schools (Dehn, 2009). Even this was encountered by researchers when conducting initial studies at two Junior High Schools in Bandung City, Indonesia. Based on preliminary studies in SMPN X and SMP Y in Bandung, it was found that females who get relational bullying from their classmates are perceived as painful experiences, which ultimately affect their judgments about themselves from how their friends treat them. Silvirmen and Treffers (2001) also explain this that when female adolescence gets relational bullying, they will internalize any negative feedback that they receive in the form of negative remarks about themselves, and negative treatments such as exclusion and social rejection they receive. So that females who are victims of relational bullying develop a negative self-image, which is a picture of their self-attribution of how they are accepted and treated by peers (Kuin and Paulien, 2014).

Negative self-image that she is a bad person, the weird person who is not liked by friends will affect her evaluation that will decreasingly affect both developments of positive self-views and self-esteem of female adolescence. Then she gets a worthless feeling because of her inability to make friends and cannot make herself accepted by her friends. At that moment, her self-esteem was in a dangerous condition as an adolescent. Because adolescence's self-esteem is determined by self-evaluation in self-competence in dimensions that are important to her and self-evaluation through how people accept it (Harter, 1993). For this reason, adolescences who experience relational bullying are reported to have low self-esteem (Olweus, 1997).

This low self-esteem condition is a contributing factor causes female adolescents to be re-bullied again as they become vulnerable of negative feedback from peers that trigger negative responses to cognitive, affective and behavior of female adolescent when dealing with re-abuse situations (Dutton and Brown, 1996). Affectively, they will feel bad about themselves, and they feel humiliated among their friends. This feeling will spread to thoughts of the female adolescent with low self-esteem earlier (Dutton and Brown, 1996). Thus, this occurrence makes a negative schema network that contains negative self-images that are excessively accessed. So the assessment and the feeling that they are worthless continue to be maintained, which makes them display maladaptive behaviors such as not resisting, not assertive, silent, and not asking for help in that situation (Mackleum, 2003). As a result, the female adolescent who is victims of relational bullying will continue to be trapped in the circle of bullying. Therefore, the problem of self-esteem in female adolescents who are victims of relational bullying is a major problem that must be addressed to help them deal with the bullying situation.

Harter (2012) explains that an adolescent's self-esteem can be seen through an evaluation that they made in general about themselves self which is called by Harter as global self-worth and can also be specified through an evaluation on the dimensions of self-concept. The dimensions are (1) scholastic competence, (2) social competence, (3) athletic competence, (4) physical appearance, (5) job competence, (6) romantic appeal, (7) behavioral competence, (8) close friendship. However, it is only on the most important dimension that can influence adolescent self-esteem in general.

In the case of relational bullying, self-esteem on the dimensions related to social relations, namely the dimensions of social competence, and close relations. It negatively affected and affect the self-esteem of young women victims of social abuse in general, along with the social harassment measures received by the victim attack their abilities and sense of worth in their friendship relationships. Therefore, efforts to improve the self-esteem of female adolescents' victims of relational bullying will begin.

One intervention that can be used to improve the self-esteem of female adolescences who are victims of relational bullying is Competitive Memory Training (COMET). COMET is an intervention specifically designed by Korrelboom to overcome several psychological problems caused by low self-esteem (Karrelboom et al, 2008). In several previous studies, COMET has been tested as an effective intervention to increase self-esteem on the problem of low self-esteem in children, adolescents, and adults (Karrelboom et al, 2008). Considering the problem of low self-esteem in this case of social abuse as one of the problems that can make victims at risk of experiencing more severe psychological problems such as social anxiety and depression. Then this COMET intervention can be used in this case of relational bullying.

In COMET, efforts to improve self-esteem are carried out by facilitating individuals to activate more memory networks that contain positive self-images through valuable experiences throughout their lives (Karrelboom et al, 2008). The step is to activate the positive memories from positive experience that contains a positive self-image through inspiring the emotions of



female adolescence who are victims of relational bullying, so they can remember and feel the positive experience again. The trick is to imagine the event, positive self-talk with gestures and facial expressions, and the use of music (Karrelboom et al, 2008). Thus the memory footprint associated with the practice experience that accesses more networks that contain positive self-images will become stronger (Karrelboom et al, 2008). Hence, the positive self-image representation is displayed more in the cognitive scheme, which can increase self-esteem (Staring and Van den Berg, 2016). Even this process is repeated for several sessions until the relational bullying female-adolescence victim can be confident in having a positive self-image that makes her feel valuable.

Korrelboom (2008) also explains that in COMET interventions, subjects will also be trained to maintain their self-esteem in critical situations that can threaten self-esteem. The way to do it is by retrieval competition, which is by doing memory retrieval, which contains positive self-images continuously when at the same time, they are also trained to face the situation of bullying (in imagination). In this way, the association of new memory networks to the bullying situation can also be formed, namely the network that directly accesses the memory that contains positive self-images. So that they can maintain their positive self-image, and they feel confident in their competence. As a result, they will be able to protect their worth with that (Brown and Maeshall, 2006).

It strengthens the importance of COMET implementation in the female adolescent victim of relational bullying. It is because when they continue to deal with bullying situations, their self-esteem conditions will continue to be endangered by often activating networks that contain negative self-images when faced with harassment situations. However, by applying COMET to the female adolescent who is victims of relational bullying, it can minimize the activation of negative self-images when dealing with bullying situations.

That is why the module from COMET from Korrelboom can be implemented in the case of relational bullying as an intervention carried out to increase self-esteem for the female adolescent victim of relational bullying. In addition, implementing the COMET module in the case of relational bullying can provide updates on the scope of self-esteem issues that can be overcome by COMET interventions. Considering this intervention has never been applied to cases of relational bullying with specifications on female adolescent victims.

## **METHODS**

### *Participant*

This research is a quasi-experimental study with the type of One Group Pre-Test Post. The research design used is the A-B-A design, which aims to see the comparison of interventions before and after the intervention is given. Subjects in this study research were three female adolescences aged 13-15 years who experienced relational bullying for at least 6 months.

### *Measures*

The measuring instrument used in this study was the 2012 revised Self-Perception Profile for Adolescents (SPPA) questionnaire by Susan Harter. This questionnaire is used to measure adolescent self-esteem in general or specifically. This questionnaire had been designed and adjusted in the process of adaptation and transparency into Indonesian. This SPPA questionnaire consists of two parts. The first part consists of 45 items to measure the competence of self-esteem in general and specifically on 8 dimensions, where each dimension consists of 5 item questions. Meanwhile, in the second part, the measuring tools amounted to 18 items to measure the importance of the 8 dimensions. Form the question in the form of a

"Structured Alternative". Each item will be scanned by giving a score of 1-4, and the results will be totaled and averaged by dimensions and then entered into three categories (high-medium-low). This instrument has a good reliability with Cronbach's Alpha = 0.826.

Through this SPPA, the subject's self-esteem score will generally be obtained through the global self-worth score and the subject's specific self-esteem score through the dimension that has the highest importance score. If the dimensions related to social relations have the highest importance score but with the lowest competence score, then this dimension influences self-esteem in general, thus strengthening the subject's self-esteem in that dimension.

### *Procedure*

This COMET intervention was carried out 8 sessions of joint sessions with allocated time duration of practicing at home for 3-5 days each session. Subjects were asked to practice each session to strengthen positive self-image 6 times a day with a duration of 5 minutes for each positive self-image possessed. During this process, the number of exercises performed and the perceived training experience will be written in the workbook ((Karrelboom et al, 2008).

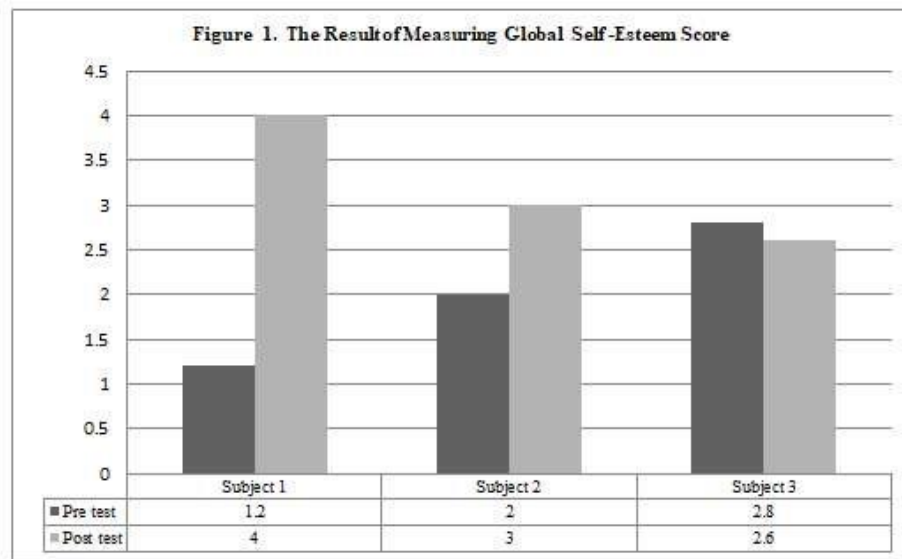
The stages of intervention are: (1) Identifying negative self-images, (2) Identifying positive self-images (3) Writing stories that contain evidence of positive self-images (4) Making positive self-images possessed can be more perceived and accepted, through imagination, Positive self-talk, (5) through body gesture and facial expressions and music (6) Combining negative self-image with a positive self-image, which is done in two steps namely familiarizing yourself with self-image negative (7) Apply the 'first aid' action to negative self-images that will attack themselves.

## **RESULTS**

The results of this study will be explained in several sections, namely (1) explanation of the results of pre and post-test measurement of self-esteem in general, (2) explanation of the results of measurement of pre and post-test dimensions of self-esteem specifically (3) explanation of the development of subject's self-esteem through a positive self-image from session 1 to session 7

### *Global Self-Esteem*

The results of pre-post measurement of the subject's self-esteem show there was an increase in the subject's self-esteem score in general after being given COMET intervention in two subjects; they are subject 1 and subject 2 but not in subject 3. In both subjects, their self-esteem scores increased from low category before the intervention to the high category after the intervention was given. Meanwhile, on subject 3 the subject's self-esteem score remained in the medium category both before and after the intervention.



**Figure 1. The Result Of Measuring Global Self-Esteem Score**

### *Specific Dimensions of Self-Esteem*

According to Harter[9], the level of adolescence self-esteem in addition to being seen in general, can also be seen specifically through the dimensions in self-concept. But only the dimensions of self are considered the most important that can affect the global self-esteem of adolescence. Based on the measurement results of the self-esteem pre-test of the three subjects, we obtained the dimension of self-esteem that was considered the most important, namely the close friendship dimension for subject 1 and subject 2, meanwhile in subject 3 in the social competence dimension. This dimension is considered the most important and influences Global self-esteem because this dimension has a high degree of importance for adolescence as indicated by the highest importance score among other dimensions, but in female adolescence victims of relational bullying actually assess themselves as not having competence in the dimension the most important for her (shown from the acquisition of the lowest competence score). Thus, there is a large discrepancy in these dimensions, among other dimensions. The existence of a large discrepancy in the self dimension which is considered the most important is what affects the low self-esteem of female adolescence victims of relational bullying

After being intervened for 7 COMET sessions, changes in the score of discrepancy in the most important dimensions of the female adolescent victims of relational bullying were seen. Even this smaller discrepancy can affect the global self-esteem scores of adolescents who are victims of relational bullying. It can be seen in Table 1.

**Table.1 Result of Measuring Specific Self-Esteem Score**

	Subject 1		Subject 2		Subject 3	
	Dimension of Close Friendship		Dimension of Close Friendship		Dimension of social competence	
	Pre	Post	Pre	Post	Pre	Post
Score of Competence	1	2.8	2	3.2	2.6	2.8
Score of Importance	4	4	4	4	3	2
Description	-3	-1.2	-2	-0.8	-0.4	+0.8

# *The Development of Subject's Self-Esteem through Positive Self-Image from Session 1 to Session 7.*

In COMET interventions, one's self-esteem will be enhanced through a process of retrieval of self-defining memory that contains positive self-images. Therefore the first step taken in the initial session before the implementation of the three COMET principles in the next session is to identify positive self-images that can affect self-esteem. Positive self-image that will be chosen is self-image related to the dimensions within oneself that are considered important.

In the case of social abuse, the three subjects show a large discrepancy in the dimensions related to social relations caused by negative self-images of social relations that are formed from the experience of abuse. Thus, the positive self-image that will be chosen for compensation from the negative self-image is a positive self-image related to social relations as well. After determining the positive self-image owned by each subject, the next step is to carry out a process of retrieval positive self-defining memory that contains events that show positive self-image continuously. The process of retrieval to positive self-defining memory is carried out from session 1 to 7 sessions. After being given intervention for 7 COMET intervention sessions and 1 review session, the activates positive self-image can increase the level of global self-esteem in both subject 1 and subject 2, but not subject 3.

**Table.2 Description of the Process of Retrieval Self Defining Positive Memory to Improve Global and Specific Self-Esteem Subject**

	Subject 1	Subject 2	Subject 3
Stage 1	The subject can remember and identify 4 positive self-images through the evaluation of self-defining memory. After doing the exercises, she felt strong emotions about herself that she was a valuable person	The subject can remember and identify 4 positive self-images through the evaluation of self-defining memory.	The subject is inaccurate in selecting and re-calling the self-defining memory, which contains a positive self-image. She needs to be retrained
Stage 2	The subject can write down events in detail from self-defining memory that contains a positive self-image. he felt warmth when writing the story in the diary	Subjects can feel strong emotions like actual events when writing events about the positive self-image in detail	Subjects cannot write evidence that shows a positive self-image when writing stories directly. She needs to be guided in practice
Stage 3	Subjects can feel the same emotions when practicing memory retrieval	The subject felt more able to understand herself which made her realize that there are still many positive self-images that can be developed on her	Subjects can interpret events that contain a positive self-image that makes them feel valued
Stage 4	The subject felt that she was valuable when practicing using gestures and facial expressions	The subject felt that she was valuable when practicing using gestures and facial expressions.	The subject cannot strengthen feelings about her positive self-image when practicing using body gestures and facial expressions because negative emotions arise when practicing
Stage 5	Subjects felt more quickly accessing self-defining memory that contains a positive self-image when listening to music	The subject feels calm, happy, and happy when listening to music. It helps itself when doing memory retrieval process	Subjects felt more quickly accessing self-defining memory that contains a positive self-image when listening to music
Stage 6	The subject can imagine events about positive self-image even though previously	the subject is not disturbed when asked to remember events about negative self-	When practicing counterconditioning, which is asking the subject to remember

	confronted with the imagination of a threatening situation	image. Subject still feels valuable and does not look down on herself	negative self-image events and immediately remember positive self-image, she cannot overcome the negative emotions that arise when imagining events from a negative self-image.
Stage 7	Not feeling negative emotions when dealing with threatening situations after practicing for 3 days and still feeling herself a valuable person	the subject feels stronger about positive self-images that make her feel valuable	subjects need more time practicing retrieval competition to positive self-defining memory until the subject still feels valuable

An increase in the subject's self-esteem in both subjects and not in the third subject can be seen through the affective and cognitive achievement of each subject when strengthening positive self-images to enhance self-esteem. In subject 1 and subject 2, self-esteem began to increase while in session 4. The positive self-image was strengthened by carrying out a process of retrieval to self-defining memory with kinesthetic stimulus and verbal stimulus. They were practicing positive self-talk while showing body gestures and facial expressions repeatedly in front of the mirror.

After previously from session 1 to session 3 also practiced retrieval to self-defining memory and was getting stronger in session 6 through session 8. Meanwhile, in subject 3, she seemed to experience some obstacles in strengthening positive self-image seen through affective and cognitive achievements that did not work in several sessions, namely session 1, session 4, and session 6.

In session 1, subject 3 encountered obstacles in identifying positive self-image through her shared memory with friends. She seems difficult to be able to summon positive and clear positive memory to determine her positive self-image through objects that can remind her of the incident. But after being given directions again by giving examples of stories of a positive self-image in more detail, then she can re-identify self-defining memory to find a stronger.

Obstacles re-emerge when the positive self-image strengthening is done in session 4 and session 6. In session 4, subject 3 cannot strengthen her positive self-image through a retrieval process that uses body gestures and facial expressions that are appropriate when doing positive self-talk. It is caused by feelings of anxiety when she was going to practice so that the process of strengthening the meaning of positive emotions on a positive self-image cannot be done. However, using a method that makes her more relaxed, such as with music, can help her. Then in session 6 when the subject began to conduct a retrieval competition, it seemed that she could not ignore her negative emotions when she practiced imagining threatening situations.

Therefore, the process of retrieval competition to self-defining memory that contained events about positive self-images could not be carried out perfectly. It is what ultimately affects the competence score on the dimension of social competence, and it has an impact on the general self-esteem score, which does not increase after being given an intervention.

## DISCUSSION

The self-esteem in adolescent victims of relational bullying is enhanced through the positive self-image possessed by the subject. The trick is to strengthen access to positive self-defining memory retrieval that includes events to show positive self-image through a continuous retrieval process. The retrieval process to positive self-defining memory is carried out from session 1 to session 7 by applying the three principles namely (1) Emotional salience, which is

reinforced by imagination, positive self-talk, motor (body gestures and facial expressions) and music (2) Repetition, repeating the reinforcement of the meaning of important emotions with practice at home (3) Association, which is to strengthen the meaning of positive emotions towards positive self-image through counterconditioning, which is to make associations between situations that will enable negative self-images by always activating the network that contains positive self-images (Karrelboom, 2009).

The intervention has 7 sessions of COMET intervention and 1 review session. The results obtained that doing a retrieval to self-defining memory that activates positive self-image can increase the level of self-esteem in both subject 1 and subjects 2, but not on the 3rd subject. In general, the increase in the self-esteem of the two subjects occurs through a process of retrieval that is carried out continuously from positive self-defining memory. When the positive self-image is always accessed and maintained in a network of cognitive schemes, it can strengthen the important emotional meaning of the self-image event. The process of retrieval applies the technique of imagination of the event, which is followed by conducting positive self-talk by regulating body gestures and facial expressions following the sentences spoken. Through the practice experience that emphasizes the behavioral experiment, it makes the subject's feelings carry over to the sentence she is saying as she feels the event seems to repeat itself. Resulting in excessive emotional intensity when doing the retrieval, which has an impact on the cognitive process of the subject. As a result, the positive self-image becomes stronger to be felt, which ultimately affects the subject's self-esteem, both specifically and in general.

It can occur through the relationship between emotions and self-defining memory, which contains events from a positive self-image. Bower in Network Theory of Memory and Emotion (Tafarodi, et al, 2003) explains that when retrieval continues to be carried out by arousing positive emotions from memory, then other memories that have the same positive emotional content can also be accessed. So that correspondence is formed between units of positive memory that can provide several evaluative information for themselves. So in the context of increasing self-esteem in adolescent victims of relational bullying, a collection of interconnected memory units that contain positive self-images can be a source of information to re-evaluating themselves.

## **Implication**

Competitive Memory Training (COMET) interventions can be implemented in two female adolescent victims of relational age 13-15 years who have the same duration of bullying, which is less than 1 year. It can be seen through increasing the self-esteem score after being given an intervention, namely self-esteem in general or specifically on the dimension that is most important to her, namely the dimension of a close relationship.

Meanwhile, subjects who have a long history of harassment (> 1 year), did not seem to experience a significant increase in self-esteem scores in general and specifically on the dimensions that were most important to her. It is caused by the amount of duration and frequency that is lacking in practice followed by the thought process of the subject, which is still concrete, so it is difficult to do exercises that use a lot of more abstract thinking processes.

## **CONCLUSIONS**

Parenting self-efficacy has an important role for parents to carry out parenting tasks, especially for mothers. The presence of parenting self-efficacy builds their beliefs and feel efficacious doing parenting tasks. The role of a parent more is expected while children were facing problems to improve the child's behavior. This research showed that parenting self-efficacy of

mothers whose children are sexual offenders is they feel incompetent about how to carry out parenting tasks. This case made them are questioning their parenting competence. Besides, they don't find another better way how to apply parenting techniques for their children.

Based on the parenting self-efficacy domain, there are two of five domains that parents believe about their competence and feel efficacious, these are health domain and recreation domain, although they are not fully believed. Meanwhile, they don't feel efficacious in another domain, such as achievement, discipline, and nurturance, particularly after these cases. There are differences between a mother's belief about competence in parenting. It depends on the perceived socio-marital support of the mother.

## REFERENCES

- Brown, J. D., & Marshall, M. A. (2006). The three faces of self-esteem in M. Kernis (Ed), *Self-esteem: Issues and Answers*. Selected Reading, Pg. 4-9. New York: Psychology Press.
- Dehn, Karalyn. 2009. *Relational Aggression and Middle School Teachers' Perception*. Thesis. University of Wisconsin-Stout
- Dutton, Keith.A and Brown, Jonathon.1996. *Global Self Esteem and Specific Self-Vies as Determinants of People's Reaction to Success and Failure*. Department of Psychology: University of Washington
- Harter, Susan. 2012. *Self Perception Profile for Adolescents: Manual and Questionnaires*. Denver: University of Denver, Department of Psychology.
- Harter, Susan. 1993. Causes and Consequences of Low Self-Esteem in Children and Adolescents. Dalam Baumeister (ed). "*Self Esteem, The Puzzle of Low Self-Regard*" *Selected Reading*, pg. 87-116. New York: Plenum Press.
- Korrelboom, Kees. 2009. Competitive Memory Training (COMET) for Treating Low Self Esteem in patients with Eating Disorders: A Randomized Clinical Trial. *Journal of Counselling and Clinical Psychology*. Vol 77 No 5: 974-980.
- Korrelboom, Kees, et al. 2008. Treating Obsessions with Competitive Memory Training: A Pilot Study. *Association for behavioral and cognitive therapy*. Vol 31, No. 2.
- Kuin, Marijke and Peters Paulien. 2014. *Zelfbeedtraining voor Kinderen en jongeren*.: Bohn Stafleu van loghum.
- Macklem, Gayle. 2003. *Bullying and Teasing, Social Power in Children's Group*. New York: Springer Science and Business Media
- Olweus, Dan. 1997. Bully Victim Problem in School: Facts and Intervention. *European Journal of Psychology of education*. Vol 7 : 495-510.
- Silvirmen, Wendy K dan Treffers, Philip. D.A. 2001. *Anxiety Disorders in Children and Adolescents*. London: Cambridge University Press
- Staring, A.B.P dan Van den Berg, D.P.G et al. 2016. Self Esteem Treatment in Anxiety, A Randomised Controlled Crossover Trial of Eye Movement Desensitisation Reprocessing (EMDR) versus Competitive Memory Training (COMET) in Patient with Anxiety Disorder. *Behavior Research and Therapy* Vol 2
- Tafarodi, Romin. W, Marshall, Tara. C and Milne, Alan. B, 2003. Self Esteem and Memory. *Journal of Personality and Social Psychology*, Vol. 84 : 29-45
- Woods, Sarah and Wolke, Dieter. 2003. Direct and Relational Bullying Among Primary School Children and Academic Achievement. *Journal School Psychology*, 42: 135-155

# What Makes Orphan Happy? A Study in Padang City Orphanage

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## **Abstract**

The current research describes the happiness among orphans in Padang City's orphanage. The used approach was qualitative research with the study of phenomenology. The data collection was done by interview, observation, and visual media. The informants of this research are three orphans (2 boys and 1 girl) in two orphanages on Padang City. Informants are chosen by purposive sampling technique. Data analysis was done with interview transcript (verbatim), cluster of meaning and textural, structural description. The results of this study showed that orphan experience some kind of happiness. First is social happiness (happiness that associated with people around like family, friends, caregivers, and teachers), personal happiness (happiness that experienced by a child when they see their existence), and situational happiness (fluctuating and individual happiness).

**Keywords:** *Children, orphan, happiness*

## **INTRODUCTION**

Children are individuals who are in a range of development that starts with infants to teenagers. According to Hurlock (2002), childhood is divided into two periods, early childhood and late childhood. Early childhood begins at the age of 2 years to 6 years or sometimes referred to as a preschool or pre-group (Hurlock, 2002). The cognitive development of children in this period is still egocentric but has developed towards the perspective of others. In this period, children are still developing ideas that are not logical because cognitive maturity has not yet been achieved (Papalia, 2008).

Late childhood lasts from 6 years to 13 years in women and 14 years in men (Hurlock, 2002). This period is school age. The cognitive development of children at this age is called concrete operational by Piaget (Papalia, 2008). This stage is characterized by the ability of children that have been able to use mental abilities such as reasoning to solve problems. Children have also been able to think logically because they have been able to understand various aspects of the situation.

Children in this period, especially the age of 5-12 years, have had cognitive and affective maturity that allows the study of emotions, especially happiness. During childhood, emotional and cognitive development was achieved, including the ability to gather information from many sources to help understand and explain the broad range of their emotions and the emotions of others (Berk in Holder, 2012).

During childhood, the family plays an important role in meeting basic needs so that the child is physically and psychologically healthy. Some of the child's primary needs include the need for a constant loving relationship, the need for security, the need for individual experience,



needs experience following the stages of development, the need for support, and the need for a sense of security for the future (Brazelton and Greenspan in Andersen, 2010). Parents play an important role in the process of meeting the basic needs of children to grow and develop.

But not all children can feel the love and care of their parents as they should. Some children are separated from their families for reasons such as the death of parents (being orphaned). They did not have relatives who are able or willing to care so that they become homeless, causing these children to be raised in care institutions such as orphanages (Aesijah, 2014).

Orphanage, according to Minister of Social Decree No. 50 / HUK / 2004, is an institution that has the task of providing guidance and services for orphans, orphans who are economically incapable, and also homeless children. Hence, their potential and learning capacity is restored and can develop naturally.

The orphanage, as an institution, accommodates children of various backgrounds, ages, and genders. Children who need alternative care in an orphanage are children who are in a family condition that does not provide adequate care, children who do not have a family or where family or relatives are unknown, children who are victims of violence, mistreatment, neglect, or exploitation and children who are separated from family due to disaster, both social conflict and natural disaster (Regulation of the Minister of Social Affairs Republic of Indonesia Number: 30 / HUK / 2011).

Orphanages in Indonesia number around 5,000-8,000 orphanages (Schubert, 2015). Orphanages in Padang City amounted to 24 orphanages with 1,100 foster children in 2015. Foster children in the orphanage in Padang is the largest number compared to the city and other districts in West Sumatra (Karim, 2011). Orphanage data by the Ministry of Religion and data from the Padang City Orphanage Cooperation Agency show the number of foster children and the number of orphanages in the city of Padang increased from 2011 to 2015. In 2011, the number of foster children was 1048 people and increased in 2015 to 1,100 people. While the number of orphanages in Padang City in 2011 totaled 21 orphanages and increased in 2015 to 24 orphanages.

Child care in orphanages can cause children to experience various risks of limitations and problems in terms of facilities, environment, and care. Limitations in these facilities can affect the ability of orphanages to ensure optimal psychosocial development of children (Dalimunthe, 2009). Other problems can arise from the surrounding environment. Orphanage children get negative views from the environment, such as being labeled as "orphanage", labeled poor because of their inability to follow current trends so that friends at their school reject them, and there are orphan caregivers who scoff at foster children because they are unable to work school assignments well (Prabadewi, 2014). Allport said the effect of this view could lead to several problems such as low self-esteem, decreased psychological well-being, and failure (Sarwono, 2009).

Another most prominent limitation is caregivers. Following the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number: 30 / HUK / 2011, the ratio of caregiver to the child so that supervision can be effective and care carried out more deeply is 1: 5. The number of caregivers will affect the effectiveness of supervision and care that will have an impact on not meeting the psychological and social needs of a child or child who can lack the care and affection of a caregiver. Based on the results of a research survey, the ratio of caregivers to foster children in two orphanages in Padang is 1:17 (for elementary school children) and 2: 38 (for all foster children).

Limitations experienced by orphans can cause them to experience hospitalism (Splitz in Prabadewi, 2014). Hospitalism is the unmet need for love or affection so that it becomes emotionally alienated. Many factors cause emotional isolation, for example, due to lack of care from caregivers because of caregiver's limitations, lack of physical facilities, too strict rules and discipline that allow the child to show a quiet, passive, less responsive attitude towards others and feel inferior, they tend to withdraw and be more defensive in relationships (Prabadewi, 2014). This is contrary to the characteristics of happy individuals who have positive self-esteem, have a sense of optimism, are open, and have control over themselves (Myers, 1995).

Sumner (Veenhoven, 2006; Feldman, 2008) defines happiness as having a positive attitude towards life, which is fully influenced by cognitive and affective aspects. According to Carr (2004), overall happiness depends on cognitive evaluation in several domains of life, such as family and affective experiences that occur in the domain of life. Diener (Carr, 2004) suggested that the affective aspects related to positive emotions felt by individuals include excitement, feelings of joy, pride, affection, and satisfaction. Meanwhile, cognitive aspects are related to satisfaction with parts of life. Satisfaction with parts of life includes satisfaction towards oneself, family, friends, health, finances, work, and leisure.

For children, happiness is not entirely subjective experience, but it is an intersubjective space or psychological relationship between one person and another (Thoilliez, 2011). Children feel happiness with others and through others. Hurlock (1980) states at the age of late children, they are often enough, close enough, or long enough to deal with other people outside the home so that it can affect their happiness.

Holder and Coleman (O'Rourke, 2010) suggest that happiness in children can be different from adults and adolescents because children do not yet have cognitive maturity and have not experienced some life events that affect happiness in adults.

The happiness of children with adults can be different through the predictors of happiness. In children, their happiness can be seen from several factors, such as important events and daily situations, aspirations, talents, and relationships (Thoilliez, 2011). Important events and daily situations are children's perceptions of events that cause their happiness or sadness in the past and present as well as everyday situations that make them feel happy or sad. These important events and everyday situations include things like family, friends and friendships, school performance, parties, and special events, free time and obligations, illness or hurt and morals and values.

The second factor is that aspirations show what hopes for the future, how happy or sad they look at their future when they grow up. Children tend to view aspiration as a guarantee for their happiness in the future (Thoilliez, 2011). Aspiration, according to the results of Thoilliez's (2011) research, is divided into several things, including expectations for work, security, and continuity, as well as academic achievements.

The third factor, talent, describes the things that are mastered by children and illustrates the child's awareness of his ability to master certain things (Thoilliez, 2011). While the last factor that determines the happiness of children is the relationship (Thoilliez, 2011). This factor aims to determine the environment that is valued more by children to provide happiness for them. This factor is assessed through four situations: family, school, friends, and play. This factor is intended so that children can tell what they value as a happy experience among the dimensions in their lives.

Based on the explanation above, it can be seen that the foster children in the orphanage experience problems in terms of care, facilities, and environment that can affect the psychological condition of children, especially happiness. There is still limited research on children's happiness (Chaplin, 2009; Holder, 2012; Kurniawati, 2015). Therefore, this research was conducted to study further the picture of happiness of children in the orphanage of the City of Padang.

## **METHODS**

The approach used in this study is a qualitative approach to the type of phenomenological research. This type of phenomenological research was chosen because this study aims to find meaning, understanding of a phenomenon or human life (Yusuf, 2014), obtain answers or in-depth information about a person's opinions, perceptions, and feelings (Lapau, 2013).

The determination of informants is based on certain characteristics of being orphans, 8-12 years or in the period of late children, male and female, and being in an orphanage for about 1 year. In determining the number of research informants, researchers use theoretical sampling, the number of informants is not determined from the start but depends on the process of taking data until the sample data is saturated or the addition of informants no longer provides new information (Poerwandari, 1998).

The informants involved in this study were three foster children (have lost one of their parents) in two orphanages in Padang and three significant others consisting of two caregivers and one close friend of the informant. Data collection methods used in this study were interviews, observation, and media visuals. The results of the study were analyzed using the interview transcript method, then the horizontal stage, the cluster of the meaning stage, and the textual structural description stage.

## **RESULTS**

In this study found several themes related to the happiness of foster children in the orphanage in Padang. Foster children feel happiness through their relationships with others, such as family, friends, caregivers, and teachers at school. Foster children feel happy when they can meet their families during family visits to the orphanage or when meeting family during school holidays. While still living in the village, foster children were cared for by their families. They watch TV with family and are also treated when sick. It is what makes foster children feel sad when they first live in an orphanage because they have to live apart from their family. They also felt sad because they could not meet with his family every day.

But their sadness can be overcome when they meet parents through a parent's visit to the orphanage or when they return home. Informants still feel the attention and affection of parents or family even though they now live in an orphanage

During his/her stay at the orphanage, the role of the family was replaced by a caregiver. Caregivers pay attention to children's daily needs, such as reminding bathing, eating, praying, or providing care when they are sick. Caregivers also accompany when they are studying at the orphanage.

In addition, the caregiver also teaches science and skills to foster children, such as Janu, who said his memorization of the Qur'an became better since he was in the orphanage and Febi, who was taught to traditional dance by caregivers in the orphanage.

In addition to family and caregivers, the happiness of foster children is also affected by friendships in orphanages and schools. Through this friendship, foster children no longer feel

sad because they have to live in an orphanage. With friends, foster children play together, laughing, learning, and also feeling happy when they go on vacation together with other orphans.

Another important event that played a role in the informant's happiness was an achievement at school. In this study, foster children have favorite subjects and feel satisfied when they can learn, such as mathematics and sports in school. They feel a sense of joy when they get the class champion and get achievements through competitions held at school.

Through their achievements, foster children feel proud and joy when they get attention from the teacher at school. The attention of this teacher makes children happy because of the praise and motivation for their abilities.

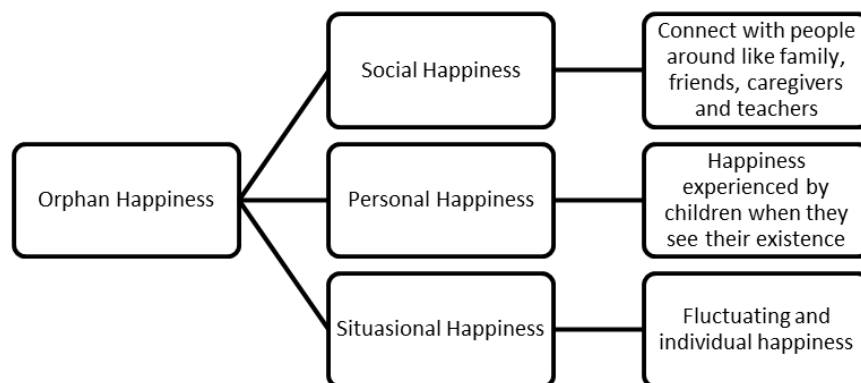
Foster children in this study show an optimistic attitude where they have the desire to continue to excel in school and the next competition even though they have failed before.

Another optimistic attitude is shown by the desire of foster children to save money they get from competitions and events held at the orphanage for their future when they no longer live in the orphanage.

Regarding the future, foster children in this study have a positive view of their future. They feel their future will be happy. They have ideas they want to achieve and make them motivated to study harder and be more serious.

## DISCUSSION

Based on the findings of this study, there are several theories and previous studies that reinforce the assumptions inferred from the results of data processed in this study.



**Figure 1. Orphan Happiness**

In children, happiness is not an entirely subjective experience but is an intersubjective space or psychological relationship between one person with the other or in other words. The child feels happiness with others and through other people (Thoilliez, 2011). In addition, Chaplin (2009) adds that achievement (good school grades, good at math) also helps make children feel happy. In line with Thoilliez (2011) and Chaplin (2009), this study finds those foster children feel happy when they are with family, friends, caregivers, and teachers at school and also feel happy when achieving good grades at school.

Orphan happiness can be grouped into three parts. First, social happiness where children experience happiness as a result of their interactions with people around like parents, friends, caregivers, and teachers at school.

This type of social happiness is seen as the most prominent type of happiness in the orphan. The orphan seems to experience happiness when they meet their family during family visits or when they return home during the holidays (informant of this research have lost one of their parents). Foster children also look happy when they can spend time and get support from peers at the orphanage or school. In addition, while staying at the orphanage, they also feel happy when they get the attention given by the caregivers. While at school, in addition to friends, foster children also feel happy when they get praise or motivation to learn from the teacher.

The prominence of this type of happiness is in line with studies of happiness in previous research that happiness in children has the characteristics that are unique and different from adults. Happiness in children is intersubjective space or a relationship with others. Children feel happiness with others and through others. Besides, this can also be influenced by children's social abilities. Children are socially dependent individuals. Children's lives are still very dependent on other people, such as parents or other adults, so that their presence or absence determines their happiness. It is in line with the results of research by Holder and Coleman (Thoilliez, 2011) what makes children happy is accompanied, both by friends and family. Friends and family as conversation partners, and provide a feeling of security and protection for children.

The second type of orphan happiness is personal happiness. This happiness is experienced when they see their existence. They consider themselves to have some positive characters, such as having a passion for learning and sharpen their ability to continue to be class champions or competitions. In addition, when they imagine the future, they also see their future optimistically. They have aspirations to achieve and have the motivation to learn to be able to achieve these goals.

The results of previous studies indicate that there is hope in the future, and the desire to improve abilities (self-improvement) in children is influenced by how teachers and parents assess (Thoilliez, 2011). Children will feel valued both in terms of who they are, what they do, their abilities and efforts to become better, and achieve their goals.

The third type of happiness is situational happiness. If the previous happiness is permanent, this happiness is fluctuating and individual. In this case, children feel happy in several free situations such as when playing, watching TV, going out with friends and caregivers, as well as getting a class champion or competitions.

Related to these findings, previous research (Gleave, 2012), for children, play is what makes them happy because in playing, children are free to determine what they want. Hurlock (2002) shows that playing in children (playing ball/jumping rope or watching TV) is an important matter because it contributes to the personal and social adjustment of children and provides learning experiences for children. In addition, the achievement of academic achievement with happiness is a reciprocal relationship (Quinn, 2007). Children show the ability to excel at school because they are happy and get achievements at school make children feel happier.

## **CONCLUSIONS**

Orphans in this study experienced several types of happiness, social happiness, personal happiness, and situational happiness. Social happiness arises as a result of children's interactions with those around them, such as family, friends, caregivers, and teachers at school.

Happiness, due to this interaction is because of their age, children's happiness is an intersubjective space or relationship with others. Children feel happiness with others and through others.

The second happiness is personal, which is experienced as a result of self-assessment, such as being diligent in learning and being optimistic and having goals they want to achieve in the future. This personal happiness arises because they feel valued for who they are and their abilities by others, such as parents and teachers. While the third happiness is situational. This happiness is fluctuating and depends on things such as playing, watching TV, going out for a walk or being a class champion.

## REFERENCES

- Aesijah, S. (2014). Pengaruh pelatihan regulasi emosi terhadap kebahagiaan remaja panti asuhan yatim piatu. Tesis. Surakarta: Universitas Muhammadiyah Surakarta.
- Andersen, S., et.all. (2010). Children and the good life: New challenges for research on children. New York: Springer.
- Carr, A.(2004). Positive psychology: The science of happiness and human strengths. New York: Brunner-Routledge
- Chaplin, L.N. (2009). Please may I have a bike? Better yet, may I have a hug? An examination of children's and adolescents' happiness. *Journal Happiness Study*, 10, 541-562.
- Dalimunthe, K.L. (2009). Kajian mengenai kondisi psikososial anak yang dibesarkan di panti asuhan. Bandung: Universitas Padjajaran, Fakultas Psikologi.
- Feldman, F. (2008). Whole life satisfaction concepts of happiness. *Theoria*, 74 (3), 219-238.
- Gleave, J., & Hamilton, I.C. (2012). A world without play: A literature review on the effect of a lack of play on children's lives. [www.playengland.org.uk](http://www.playengland.org.uk)
- Holder, M. D. (2012). Happiness in children: Measurements, correlates, and enhancement of positive subjective well-being. London: Springer.
- Hurlock, E.B. (1980). Psikologi perkembangan: Suatu pendekatan sepanjang rentang kehidupan edisi kelima. Jakarta: Erlangga.
- Hurlock, E.B. (2002). Perkembangan anak jilid 1 edisi keenam. Jakarta: Erlangga.
- Karim, A. (2011). Data Panti Asuhan Yatim Piatu. Jakarta: Kementerian Agama Republik Indonesia.
- Kurniawati, Y., Hong, J. (2015). May I have some more time to play, please? : An exploration of Javanese Indonesian children's happiness. *Research on Humanities and Social Sciences*, 5 (12), 69-74.
- Lapau, B. (2013). Metode penelitian kesehatan. Jakarta: Yayasan Pustaka Obor Indonesia.
- Myers, D.G., & Diener, E. (1995). Who is happy?. *Psychological Science*, 6(1)
- O'Rourke, J. & Martin, C. (2010). Lucky to be happy: A study of happiness in Australian primary students. *Australian Journal of educational and developmental psychology*, 10, 94-107.
- Papalia, D.E., Feldman, R.D., & Olds, S.W. (2008). Human development (11thed). McGraw Hill Higher Education.
- Poerwandari. E. K. (1998). Pendekatan kualitatif dalam penelitian psikologi. Jakarta : LPSP3 UI
- Prabadewi. K.D.L., & Putu, N.W. (2014). Hubungan konsep diri akademik dengan motivasi berprestasi pada remaja awal yang tinggal di panti asuhan di Denpasar. *Jurnal Psikologi Udayana*, 1(2), 261-270.
- Sarwono, S., dkk. (2009). Psikologi Sosial. Jakarta : Salemba Humanika.

- Schubert, B., Rusyidi, B., Pratiwi, A.P., & Halim, M.A. (2015). Penilaian cepat program kesejahteraan sosial anak (PKSA). Jakarta : Kementerian Sosial Republik Indonesia.
- Thoilliez, B. (2011). How to grow up happy : An exploratory study on the meaning of happiness from children's voices. *Child Indicators Research*, 4(2), 323-351.
- Quinn, P. D., and Duckworth, A. L. (2007). Happiness and academic achievement: evidence for reciprocal causality. Paper presented in Annual Meeting of the American Psychological Society Vol. 4, Washington, DC.
- Veenhoven, R. (2006). Healthy happiness: Effect of happiness on physical health and the consequences for preventive health care. *Journal of Happiness Studies*, 9, 449-469.
- Yusuf, A. M. (2014). Metode penelitian : kuantitatif, kualitatif, dan penelitian gabungan edisi pertama. Jakarta : Kencana.

# Video Tutorial Learning (VTL) to Improve Students' Motivation in Microteaching Activities

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## Abstract

The purpose of this study is to provide Video Tutorial Learning (VTL) to improve students' motivation in microteaching activities. This research used a qualitative approach. The steps of this study are (1) Information gathering on the need to design VTL Model (2) Designing VTL model; and (3) Investigating the response of students and lecturers on the improvement of their motivation to learn a microteaching subject. The results of the study indicate that (1) VTL model is needed by lecturers and students (2) VTL model is supplemented with a book model, video tutorial, and evaluation sheet (3) VTL model could improve students' motivation in microteaching activities. These results imply that this VTL model can be used by lecturers and students in microteaching activities because it can improve students' motivation to learn a microteaching subject. It also can be done either with the assistance of a lecturer or without a lecturer.

**Keywords:** *Microteaching, video tutorial learning, students' motivation*

## INTRODUCTION

No one can deny the fact that the increased use of video as a teaching medium grows very fast in the context of higher education. In the current era, efforts to improve education continue to be carried out, especially in educational institutions. This improvement effort is also in accordance with the mandate of Law No. 14 of 2005 on teachers and lecturers. The mandate clearly states that a teacher should become a professional teacher.

Four competencies must be improved by professional teachers, namely professional, pedagogical, personality, and social competencies. One of the competencies that must be increased is pedagogical competence. This competence is related to the ability of a teacher to manage learning, which includes planning, implementing, and evaluating. Many courses can develop pedagogical competencies of prospective teachers, including the microteaching.

Microteaching is an effective teaching method that is used for the professional development of pre-service teachers and in-service teachers (Killic, 2010; Fernandez, 2005; Kpanja, 2001). This method was first initiated by Allen & Ryan in 1969. They proposed interrelated stages; they are planning, teaching, observation and criticism, re-planning, re-teaching, and re-observation. The stages, then, was improved by other experts and practitioners such as Kazu (1996); Kuçukahmet (2004), Fernandez (2005), and Tok (2007).

The microteaching lecture process, especially in the Faculty of Tarbiyah and Teachers Training (FTIK) IAIN Batusangkar, has used various student-oriented learning models. Based on the results of interviews with several microteaching lecturers from several departments, such



department of mathematics, physics, and biology, students did not use media such as a video to enhance their microteaching skills. As a result, they have difficulty training skills to provide variety, reinforcement, and lack of material development. The same condition was also found in the Department of Islamic Education. Most students are not able to develop material and have abilities that are not good at strengthening. In other words, the reinforcement carried out is not as expected.

Other findings can be seen in the results of the microteaching examination assessment in the FTIK IAIN Batusangkar. Some students were not able to practice teaching skills perfectly, including skills in explaining the material, especially in the development of the material, in conducting variations in teaching styles, and providing reinforcement. Likewise, based on discussion and improvement notes in the teaching micro assessment book with several microteaching lecturers, it appears that the students' abilities have not been maximized. They have not been able to practice material explaining skills and ask questions well. It is perhaps due to the absence of media like video tutorial learning.

The previous phenomenon is not much different from the facts that researchers found in several universities in West Sumatra. The implementation of microteaching is also constrained by the absence of media that supports the microteaching, such as video for microlearning that can be used as a reference in microteaching. The same thing is also found in the Faculty of Education and Teachers Training in West Sumatra that in the microteaching class, sometimes lecturers become models, or students become models. This makes the implementation of microteaching not yet effective and efficient. Ideally, teaching micro-learning is supported by media that can improve the implementation of microteaching in the classroom. The use of media, such as video learning as a new teaching tool, is believed to increase students' motivation.

Several experts and practitioners have conducted some researches related to video learning as media in microteaching courses. Rahayu, Lestari, & Mertha (2018) investigated that VCD media can improve teaching skills in the microteaching course. (Naidu & Biswal, 2005) found that video-based multimedia can enhance teacher education by stimulating intending teachers to engage more effectively in the process of productive professional learning. Likewise, Bravo, Amante, Simo, Enache, & Fernandez (2011) reveals that the use of new technologies increases students' motivation and interest in the subject.

The previous findings advocate the use of video in microteaching activities. It helps lecturers and students to sharpen the teaching skills in microteaching class. This article discusses the video tutorial learning (VTL) model as a method to teach microteaching activities. VTL is believed to enhance students' motivation in sharpening their microteaching skills. In addition, this model can make learning effective so that the goals of microteaching can be achieved.

To apply this approach, researchers chose a modeling strategy using Video Tutorial Learning (VTL). It is a strategy developed based on the principle that a person can learn through observing the behavior of others (Trianto, 2009). The selection of videos as a tutorial is because a video is one type of audiovisual media that can be manipulated and can teach a process. This video contains a tutorial on how to practice teaching skills. As a result, it can guide microteaching students to be mentored by a supervisor or can be used by students independently. The video that was designed is the real record and concrete experience of the steps in teaching micro-skills played by a model. The researchers, in this case, recorded the steps of teaching micro-skills guided by the tutorial. Learning that is accompanied by the use of audiovisual media will clarify the complexity of teaching skills in microteaching. By using videos, these teaching skills can be repeated. The repetition of an object will clarify the meaning of an object. As Edgar Dale's theory with the cone of experience, using video media

will be more concrete experience gained. Smaldino, Sharon, Lowther, Deborah, & Russell (2008) confirmed that a technique called descriptive video is available for those who have visual impairments, a soft-spoken voice describes the video, the visually impaired individual can hear the description and grasp.

## **METHODS**

The research method used is the qualitative approach. This study is intended to develop a product and seek students' responses to the use of the product to increase students' motivation to learn. Plomp & Wolde. J. Van den (1992) stated that the characteristics of development research aim to develop products, including curriculum and devices needed in learning. Therefore this study aims to produce a VTL model based in the Faculty of Tarbiyah and Teacher Training IAIN Batusangkar. In addition to this, this study is to know students' and lecturers' responses to this VTL.

Data were employed using document analysis and in-depth interviews. Document analysis was carried out to analyze the present media used in microteaching activities. Meanwhile, in-depth interviews were done to get deep information on the extent the lecturers and students need on VTL as well as their responses on the use of VTL in microteaching activities. Data were analyzed using interactive analysis, as quoted by Miles and Huberman (1984). There were four steps employed: (1) collecting data, (2) reducing data, (3) displaying data, and drawing conclusions and verification.

## **RESULTS**

### **Information gathering on the need to design Video Tutorial Learning (VTL) Model.**

Based on interviews with several lecturers at FTIK IAIN Batusangkar, UIN Imam Bonjol Padang, IAIN Bukittingi, and STIT Payakumbuh, most of them agreed to design VTL Model. Some of them responded that this model is following the demand of industrial era 4.0, where learning should be supplemented with technology. Another respondent stated that this model fitted with the students' needs in recent times. The use of this model can make the students learn microteaching independently. Others explained that this model makes students skilled, independent, and creative. Based on these responses, it can be summarized that both students and lecturers need this model in this industrial era 4.0. The same thing also stated by lecturers. They believed that this model could enhance students' understanding of the skills of microteaching. Other lecturers responded that the VTL model is a good medium to use in the microteaching activities due to its user-friendly.

### **The Design of Video Tutorial Learning (VTL) Model**

Meyer in Trianto (2009) clearly states that a model is something real and converted for a more comprehensive form. Trianto (2009), further, states that model is an object or concept to present something, while the learning model is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve certain learning goals and serves as a guide for learning designers and instructors in planning teaching and learning activities. As a working guideline, a learning model developed has several components. The components include a principle of the model, the learning procedure, and learning packs.

#### **a. The principle of the VTL**

This model provides video tutorial learning in sharpening students' skills in microteaching activities. There are several skills trained in this model. The skills include (1) skill of

introduction; (2) skill of explaining; (3) skill of questioning; (4) skill of demonstration; (5) skill of reinforcement; (6) skill of stimulus variation; (7); and (8) skill of closure. The duration of the video is 45 minutes. The VTL puts the lecturer as a guide, director, and regulator, a facilitator. This model could be used either with the assistance of a lecturer or without a lecturer.

#### b. The Procedure for Using VTL

This model consists of five phases such as (1) Introducing the goal and preparing students' mentality as well as physicality, (2) demonstrating knowledge and skills, (3) guiding training, (4) checking students' understanding, (5) providing opportunities for advanced training and implementation.

The role of a lecturer is different in every phase. In the first phase, for example, the role of the lecturer is to review, to design a lesson plan, and to explain basic teaching skills. Meanwhile, in the second step, the role of the lecturer is to demonstrate the use of VTL skill-per-skill. Then, in the third phase, the role of the lecturer is to guide students to practice basic teaching skills assisted with video tutorial learning. In the next phase, the role of the lecturer is to provide feedback on the teaching skills shown by students. In the last step, the role of the lecturer is to ask students to do advanced training teaching skills.

#### c. The Learning Packs

The VTL model is supplemented with the following packs: (1) a model book that contains the rational model, supporting theory of the model, the model used and the steps to apply the model; (2) a tutorial video, which contains a video of teaching practice demonstrated by the model; (3) and microteaching assessment sheets. This pack allows students to be skilled, independent, critical, creative, and responsible students.

### 3. VTL Enhances Students' Motivation

The result of observation and interview with lecturers and students show that they are motivated to learn microteaching. The responses of students could be stated as follows:

- a. "This video tutorial is helpful as a means of clarifying what will be expected in shaping microteaching skills. As a result, I am enthusiastic about learning it."
- b. "Using this video tutorial could engage my interest in leaning microteaching."
- c. "As a candidate of teacher, I need to use this video tutorial learning to train all of the microteaching skills."
- d. "This video tutorial learning provides us a clear step in teaching. So, I am motivated to use it."
- e. "This video tutorial motivates me to practice microteaching skills. This video could be used without the presence of a lecturer".

Similar responses were also stated by lecturers who use VTL in microteaching activities. They observed an increased level of students' motivation in the microteaching course. The following statements are explained below:

- a. "This video tutorial learning is a successful project to produce a better teacher for the future."
- b. "It's very challenging and motivating."

- c. "I observed that my students' motivation increased by using video tutorial learning."
- d. "One of the positive advantages of this video tutorial is it can enhance students' motivation to learn".

The previous evidence demonstrated that students were motivated to learn the microteaching course by using video tutorial learning. It gave them a sense of satisfaction for using that media and encouraged them to continue learning on microteaching tools to get continuous improvements.

## **DISCUSSION**

This research empirically states that VTL is really needed in recent years. It is to confirm the theory of Moran, Seaman, & Tinti-Kane (2011) that among the various technologies and social media utilized, video is the most common resource used. In addition to this, Killic (2010) points out that the most important aspect to consider in microteaching activities is teacher candidates find opportunities to develop skills in drawing students' attention, asking questions, using and managing time effectively, and bringing the lesson to a conclusion. Also, through microteaching, the teacher's class management skills improve. For this reason, the VTL model is an appropriate way to use to improve students' skills in teaching.

The use of VTL could enhance students' motivation. Students can either with the assistance of a lecturer or without a lecturer. They can even practice all microteaching skills such as the skill of introduction, the skill of explaining, the skill of questioning, the skill of demonstration, the skill of reinforcement, the skill of stimulus variation, and the skill of closure. This finding corresponds the Nuryanto's (2012) idea that video can provide a real example of the teaching in the classroom. As a result, it motivates and assists students to have an example of teaching. In addition to this, Rahayu et al. (2018) explain that learning skills will be better if it is delivered using the help of audiovisual media. Students can easily follow the movements in how to teach correctly. Bravo et al., (2011) also advocate that the use of new technologies increases students' motivation and interest in the subject.

The use of the VTL model has the potential to promote rapid learning and achieve target skills. Boisvert & Rao (2015) emphasize that video modeling has the potential to improve self-efficacy and rapid learning. They further add that video modeling allows students to achieve target skill and behavior that they may not yet be able to do independently but seek to master.

The VTL leads the clear instruction on how to use every skill in microteaching activities. It is also equipped with a video tutorial adapted from a model shown in the video. Consequently, students are easy to learn every skill they need to know and improve. They can even learn skill per skill repeatedly either in the classroom or out of the classroom.

## **CONCLUSIONS**

In the era of Information on computers and technology, increasing students' skills in microteaching activities is a must. One of the strategies that could be applied is the use of the VTL model. Based on the research findings, several conclusions can be drawn: (1) The VTL model is needed to implement at FTIK IAIN Batusangkar; (2) The VTL model is equipped with several components, namely model syntax, reaction principles, social systems, support systems, and instructional and nurturing impacts, and (3) The VTL model is deemed very valid

This research recommends that VTL is interesting and appropriate to use in microteaching activities. It is an innovative way to improve the competence of prospective teachers in the

industrial era 4.0. This research, however, only limits the issue of designing the VTL model and taking students' responses on their motivation. For the next stages, further research, such as experimental research, is needed to continue to see the effectiveness of this strategy in the field of education.

## REFERENCES

- Allen, D., & Ryan, K. (1969). *Microteaching Reading*. Massachusetts: Addicson-Wesley Publishing Company.
- Boisvert, P., & Rao, K. (2015). Video Self-Modelling for English Language Learners. *TESOL Journal*, 6(1).
- Bravo, B., Amante, B., Simo, P., Enache, M., & Fernandez, V. (2011). Video as a New Teaching Tool to Increase Student Motivation. *Conference: Global Engineering Education Conference (EDUCON)*.
- Fernandez, M. L. (2005). Learning Through Microteaching Lesson Study in Teacher Preparation. *Action in Teacher Education*, 26, 37–47. Retrieved from <http://dx.doi.org/10.1080/01626620.2005.10463341>
- Kazu. (1996). The Effectiveness of Microteaching in Teacher Training. Doktora Tezi. *Unpublished Dissertation*.
- Killic, A. R. (2010). Learner-centred micro teaching in teacher education. *International Journal of Instruction*, 3(1).
- Kpanja, E. (2001). A Study of the Effects of Video Tape Recording in Microteaching Training. *British Journal of Education Technology*, 32(4), 483–486.
- Kuçukahmet, L. (2004). Öğretimde planlama ve değerlendirme. *İstanbul: Alkım Yayınları*.
- Miles, M.B., & Huberman, M (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. California; SAGE Publication Inc
- Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media. *Babson Survey Research Group*.
- Naidu, C. S., & Biswal, A. (2005). *Use of Multimedia in Teacher Education: Need of the Future*.
- Nuryanto, A. (2012). Video Recording of Teaching Microteaching Element: An Experimental Study to Improve the Teaching Skills of Vocational Teachers Candidate. *Proceeding ICVET*. Retrieved from <http://eprints.uny.ac.id/eprint/24482>
- Plomp, T., & Wolde. J. Van den. (1992). The General Model for Systematical Problem Solving. From Tjeerd Plomp (Eds.). *Design of Educational and Training (in Dutch)*. Utrecht (The Netherlands): Lemma. *Netherland Faculty of Educational Science and Technology. University of Twente. Enschede the Netherlands*.
- Rahayu, S., Lestari, N., & Mertha, I. G. (2018). Development Teaching Basic Skill's VCD Media to Improve Teaching Skills in Subjects Micro Teaching. *Jurnal Pendidikan Fisika dan Teknologi*, 2(2), 247–252.
- Smaldino, Sharon, E., Lowther, L., Deborah, & Russell, J. D. (2008). *Instructional Technology and Media for Learning*. New Jersey: Merril Prentice Hall.
- Tok, N. T. (2007). Etkiliöğretimiçinyöntemveteknikler. “. Doğanay (Editör). Öğretimilkeveyöntemleri. Baskı. *Ankara: PegemaYayıncılık*.
- Trianto. (2009). Mendisain Model Pembelajaran Inovatif Progresif. *Kencana Prenada Media*.

# ***Game is Fame! Negotiating Interests in Halal Knowledge via Halal@School Program by IHRAM: An Action Research on HalalRace***

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## **Abstract**

Malaysia is well recognised for the Halal Hub in the region of Asia and a leader in the world's Halal industry. As a progressive Muslim country with consistent economic development and growth rate as well as political and social stability, there is a growth of research and development initiated by public universities. In 2017, 13.8% cases of excessive weight were found among primary schools students. IHRAM takes its stance for Halal education through a proactive approach of training in a collaboration with Nestle (Malaysia) Pte. Ltd. in 2018. The programme is called *Halal@School* which consists of seminar talk and HalalRace. This paper presents on analysis of action research to identify the effectiveness of HalalRace at three primary schools. ANOVA reveals significant changes of score among the three schools which explains the locations of schools that are from urban versus rural school respectively. It is found that the structure of the *HalalRace* is proficiently acceptable by the students from the primary school. The theory test and mind test become compliment to each other as a motivation to move to another stage until the end of the checkpoints. Not only theory, *HalalRace* uses a practical approach that challenge the cognitive, affective and psychomotor of the students which promotes the whole system of body to participate in the very game.

**Keywords:** *Halal, Negotiation of Interests, Action Research, HalalRace*

## **INTRODUCTION**

The increase of awareness among Muslim consumers underpins the religious obligations which leads to the increasing of demand for halal products and services. While the demographics of Muslims significantly change, the number of social class of young, highly educated, knowledgeable and practicing Muslims, who embraces an Islamic contemporary with global lifestyle, has also increased. Food has been recognised as one of the largest halal market by which the greatest challenge lies. In fact, some Muslim minority countries, food is usually associated with the ritual slaughter for the animals. In the meantime, reputational issues has

become another never ending discourse around halal which is due to misunderstandings that revolves around halal. According to Yusof (2012), the Muslim population could grow to 2.6 billion that represent almost 30 percent of the global projected population by year 2050. Not only Muslims, halal market also serves to Non-Muslims who are supportive for the halal aspects.

There is a huge attention given to Malaysia since its establishment of Halal Industry Development Corporation (HDC) in year 2006. As a progressive Muslim country with consistent economic development and growth rate as well as political and social stability, Malaysia is the leader in the world's halal industry. In order to sustain in this particular economic growth and Muslim well-being, this study, therefore, urges a platform that could really underline what is called as Halal experts in this country with a strong view in the strategy Paper 18 of 11th Malaysia plan which draws on the growth target of the halal industry namely, 1) Improving sectoral governance; 2) fortifying Halal Malaysia integrity; 3) enhancing exports; 4) connecting Malaysia to the regional halal supply chain; and 5) increasing supply of competent halal experts. While an economic report, State of the Global Islamic Economy Report 2016/17, produced by Thomson Reuters in collaboration with DinarStandard (2016), Halal experts are not given emphases particularly where the champions are Muslim majority countries. Sustainability is perceived from the economic perspective as the driver for the industry, yet, the governance issue is little mentioned. Governance includes ethics and visibility of talents as new commodity for industries.

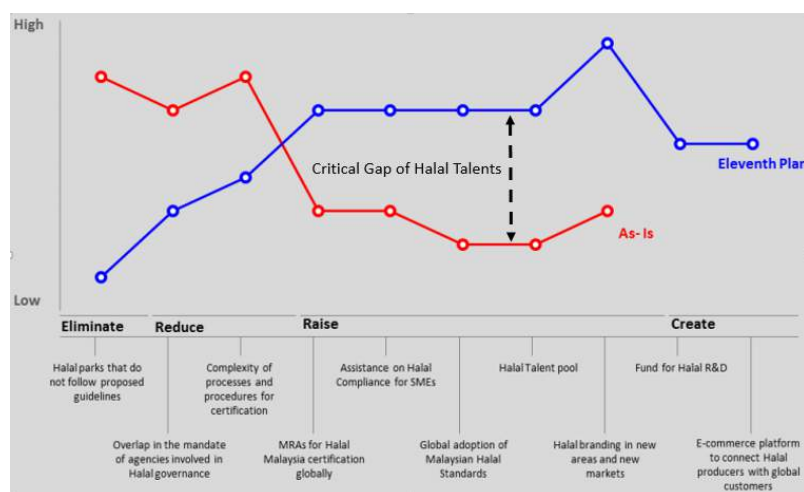
According to Muhammad Hijrah et al. (2016), there are number of issues that are prominent in relation to Halal issues in Malaysia. It includes the lack of consistent Halal understanding and Halal regulation enforcement. Among other Halal global issues include differences of halal guidelines and charges which often confused the food manufacturers (Casey, 2010). It was concluded that the situation would lead to the growing skepticism among the halal consumers and manufacturers whether these certification bodies are trustworthy (Muhammad Hijrah et. al., 2016). Malaysia, for instance, face challenges on enforcement issues were found between the authority and governance, between the relevant halal authorities (Nurulhuda, Noordin et. al., 2009). Number of scholars make a fundamentally significant stance to have a clearly defined roles and responsibilities of the various supply chain stakeholders, particularly pertaining to the halal governance, to protect the image of the halal food industry and the consumer's interest and well beings (Casey, 2010).

IHRAM (Institute of Halal Research and Management), now known as iFFAH (International Fatwa and Halal Center) after the integration with Institute of Management and Research of World Fatwa therefore, plays its roles in the development of knowledge in halal not limited to industries per se, but taking the approach of educational program of Halal@School at three primary schools in 2018. This very programme is a community based programmed which aspired primary school students to knowing halal and its awareness towards the importance of healthy living. Taking the educational approach, IHRAM managed to organize Halal@School programme in collaboration with Nestle which involved 583 students in a context of learning halal through fun approaches both a talk and HalalRace game within two hours at different schools at different dates respectively.



**Figure 1: Metro News 22<sup>nd</sup> February 2019 – Halal@School Programme**

Halal has been in high demand as influential market for the economic growth recently. It is projected that the Muslim populations will increase to 26% by year 2030 which will affect the increase of demands in halal products. In line with the transformation of services sector under the 11th Malaysia Plan, halal industries gives greater attentions towards the development of talents namely professional and supervisor who are deemed to be competent and knowledgeable in shariah due to the critical gaps in the existing scenrioHalal di Malaysia (**Figure 2**).



**Figure 2: Strategic Canvas for Halal Industries Development (11th Malaysia Plam, 2016 -2020)**

Negotiating interest is a process that occurs to every individual especially when it comes to making decisions. As knowledges is essential for self-development, this study views negotiation as a significant process that lead an individual to learn and obtain information for the purpose of awareness and development. Due to the demand of halal food worldwide, this article brings together past literatures that examine negotiation of interest and halal knowledge for better view and understanding the landscape of this study respectively.

### **Negotiation of Interest**



Interest has been perceived as a changeable emotion with that allows long term adaption goals by nurturing knowledge and diversifying skills as well as experiences. Silvia & Paul (2001) assert that interests are projected as individual fundamental motives that encourage competencies and organization. The emotion of interest participates in the development of interests which is self-sustaining that may lead people to participate with certain objects, activities or ideas for their own benefits.

Negotiation, however, is essentially understood at benefiting the interests as much as possible. Interest-based negotiations are specific type of negotiation based on a medium in which agents exchange information on the objectives that stimulate their negotiations. An interest-based approach is performed to negotiate extensively in the context of human negotiation. According to Shonk (2019), at the initial negotiations, the negotiator has to look beyond the unwillingness and drastic attempts to identify basic interests such as their basic needs, desires and motivations. As a result, the time spent more on the argument instead of identifying substitute or trying to find a compromise between the two fixed positions they have.

According to experts of negotiation, negotiation process involves economic, safety, acknowledgement, control, desires, fears and objectivity. The importance of negotiations generally refers to basic human needs specifically in decision making process. The individuals gain benefits which include ethical desires and basic human feelings that are less obvious to participants. According to Katz and McNulty (1995), interest-based negotiation also emphasizes on the importance of relations, especially if both parties operate independently; they rely on each other to achieve a common goal. In the interest-based negotiation, the intention aims at reaching acceptable outcome for both parties, which should be mutually beneficial to the parties so as to meet the interests of the parties. The outcome of the interest-based negotiation is the result by which the credibility is concerned for trust relationship development.

Interest-based or interest-based bargaining refers to a consultative process that focuses on an initial understanding between the parties negotiating through problem solving to avoid conflicts of interest and to achieve a good outcome for negotiation (Kee Mohd Yusof & Husna Johari, 2014). Importantly, the interest based negotiation is a process of forming mutual understanding as a technique of problem solving towards satisfactory result (Leventhal, 2006). The primary principles of interest based negotiation is to emerge or get a good understanding of your and other party's interest and to develop or invent a creative options that will meet those interests. This approach allows good relationship with the other party which is on mutual beneficial.

An interest-based negotiations use using more open communication where each party has similar interest in the particular relationships with one or more problems (Trembley, 2016). Both parties view the problems as a need to be solved as well as the interest that underpins the issues discussed. A better way to negotiate is to require interest-based negotiations which enables mutual satisfaction rather than a competitive discussion. Essentially, the interest-based negotiation requires cooperation and creativity to achieve their own and others' interests. It has been proven in their research that the right of approach theory is accepted in the middle of two dimensions that involve the interests of others (Tremolada, 2015).

### **Halal Knowledge**

Islam places great importance on the needs of Halal issue in the dietary requirements of Muslims In the 'Al-Ma'idah (The Table Spread, for instance, the serving on the table). Allah says in the Quran: "They ask you (O Muhammad (pbuh) what is lawful for them (as food). Say: and quote; Lawful unto you are At-Tayyibat (all kind of Halal lawful goods) foods which Allah

has made lawful (meat of slaughtered eatable animals, milk products, fats, vegetables and fruits). And those beasts and birds of prey which you have trained as hounds, training and teaching them (to catch) in the manner as directed to you by Allah; so eat of what the catch for you, but pronounce the Name of Allah over it and fear Allah. Verily, Allah is Swift in reckoning. And quote; the natural corollary to this is that trading, for instance, the act of buying and selling for Muslims are restricted only insofar as the subject matter of the trade is permissible or Halal. In relation to food, this mean that a Muslim, as a buyer, should only buy foods which are Halal and on the opposite side of the equation a Muslim, when acting as a vendor/seller, should only sell foods which are also Halal.

Syariah Law means Islamic Law based on the al-Quran, hadith (Tradition of the Messenger of Allah), ijma' (Consensus of Islamic Law) and qiyas (Deduction of Analogy) according to the Shafie or any one of the Hanafi, Maliki, or Hambali Schools of Thought which have been practiced by countries where these guidelines have been implemented. A particular food become lawful or unlawful by Syariah Law of Islamic Law if it is considered so through any one of the above mentioned sources (Hussaini & Sakr, 1984). Halal is an Arabic word, which means allowed or lawful or permitted. Most diets and foods are considered halal unless they are specified or mentioned in the Quran or Hadith. Haram is an Arabic word, which means prohibited, or unlawful. All haram foods are forbidden to every Muslim. Human beings cannot change the Haram into Halal and it is also haram to make the halal to haram. If a Muslim consumes any of these haram products, he would be sinful. In some exceptional cases such as during critical situation, a Muslim may consume the haram for survival (O'Connor et. al., 2006). Mushbooh or syubhah is an Arabic term, which means 'suspected'.

### **Halal@School Programme**

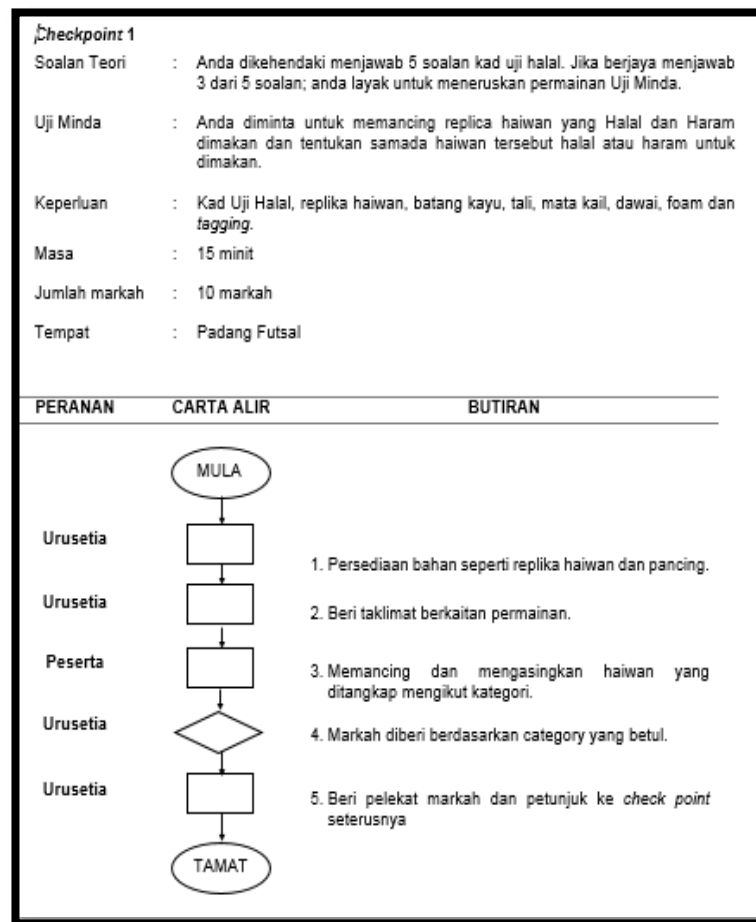
Since its establishment in 2010, IHRAM has made outstanding achievement when it comes to the development of halal knowledge at every level of communities Halal@School. The programme comes with theme of "Halal Nutrition, Excellent Education" is part of the strategies IHRAM is taking in terms of communities developments which is known as social corporate responsibility (CSR). The emphases are given to the understanding and the importance of Halal and Thoiiyyib food products for all Muslim and non-Muslim individuals without prejudices. In the meantime, Nestle (M) Sdn. Bhd. as a multinational company (MNC) plays an important role in ensuring Halal nutrition and healthy nutrition.

In collaboration with Nestle, this programme provide exposure and awareness on halal and healthy nutrition as part of the communication strategies in making the development of halal knowledge among the communities a success. The way in which the programme is designed using the affective and psychomotor approach which are the lecture of 30 to 40 minutes given by Nestle and the activities known as HalalRace from IHRAM. The lecture is designed in such a way that the students can be attentive and focused in a more interactive way by having the question and answer activities. The students were seemed to be motivated when Nestle started giving the small gifts for every answer they had.

### **HalalRace Game**

The second part of the programme is the HalalRace which is designed to create interests among the primary school students. The concept of treasure hunt is applied for the interactive and fun purposes. There students were usually divided into ten groups of ten members each. The group have to go through six checkpoints that waiting them with different questions and games. The completion of game will be assessed based on the scores they have at the end of the games. The scores will be accumulated and the top five highest scores will be given a hamper as token of appreciation. The questions are designed by two levels namely theory questions and mind

test (See Figure 1). How well the HalalRace game was scored across different schools? Are there any significant differences on the scores obtained by the students across different schools? What was the level of scores obtained by the groups among the three schools?



**Figure 3: The Example of Checkpoint 1 of HalalRace**

Based on the explanation above, this article wishes to articulate significant remarks on the outcome of the programme with specific objectives as follows:

1. To identify the average score obtained by the groups among the schools.
2. To recognize significant differences on the scores obtained across different schools.
3. To examine the level of scores obtained by the groups among the three schools.

## METHODS

This study employs a quantitative approach that uses an action research as a tool of analysis that provides systematic way of effective teaching practices (O'Connor et. al., 2006). It is a practical method for educators especially when it comes to an adequate design they would like to have in a classroom setting (Sagor, 2004; Ferrance, 2000). An action research is popularly known among teachers as professional development strategy in assessing a new curriculum program on the pedagogical method. Number of research participate in action research were found to be the impetus for positive remarks of self-reflection which turned to effective and quality learning of classroom practices (Johnson & Button, 2000; Ross et. al., 1999; Sax & Fisher, 2001).

The way in which the students' knowledge is challenged may give different impacts to the Halal knowledge they gain during the HalalRace. Not only theory testing, HalalRace promotes competitive drives along the six checkpoints that involved physical fitness, time management and intellectual challenge. Every six checkpoints carries different weight of challenge that is designed in two stages namely theory and mind test (see Table 1). The students were asked to answer the theory question before they can proceed to the mind test challenge.

The students were in divided into groups of eight to ten members depending on the overall number of students involved from the particular school (see Table 2). Besides, the size of school has been a determinant factor in identifying adequate number of student who can participate in the program for each, the lecture and the HalalRace. According to the number of participants, the group number for the HalalRace were identified by the teachers who were in charge for the particular event. The programme was executed with the assistance of Universiti Sains Islam Malaysia's (USIM) students cum volunteers.

**Table 1. The List of Questions for Every Checkpoint in HalalRace**

<b>Checkpoint</b>	<b>Theory Question</b>	<b>Mind test</b>
1	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	The participants are asked to fish the animals' replicas separating halal animal from haram animal using the fishing rod.
2	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	The Secretariat will provide the halal logo of JAKIM and halal abroad. Participants are required to do the jigsaw puzzle of Halal JAKIM logo.
3	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	The secretariat will provide 10 products. Participants are required to identify and isolate food products containing the JAKIM halal logo.
4	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	Participants are required to choose one of four envelopes containing crosswords /bonus points.
5	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	Participants are asked to place a picture of food on the Food Pyramid.
6	Participants are required to answer five halal test card questions. If successful answer three out of five questions; you are eligible to continue the Mind Test game.	Participants are asked to take the stick into the balloon without blowing it off.

In 2018, there were three primary schools were involved namely Sekolah Kebangsaan (SK) Paroi, SK Jijan and SK Batang Benar. The schools were called about the programmes and given a tentative date for their consideration. Upon approval, the schools responded through official acceptance letter which is very essential when dealing with government institution. Having had the collaboration with Nestle, the proposed schools were presented with a tentative date and number of students who will be involved. Nestle, as industry partner, has given full commitments for the hampers, souvenirs and a 40 minutes talk on healthy food and halal. Nestle made their participation compulsory for every programme that took place for this Halal@School programme.

**Table 2. The list of Schools Involved in Halal@School Programmes in 2018**

Series	1/2018	2/2018	3/2018
Date	4 May 2018 (Friday)	21 September 2018 (Friday)	21 November 2018 (Friday)
Venue	SK Paroi	SK Jijan	SKBB
Participants	85 Students (Year 6)	304 students (Year 1-6)	194 Student (Year 5)
Activities	Lecture & HalalRace	Lecture & HalalRace	Lecture & HalalRace

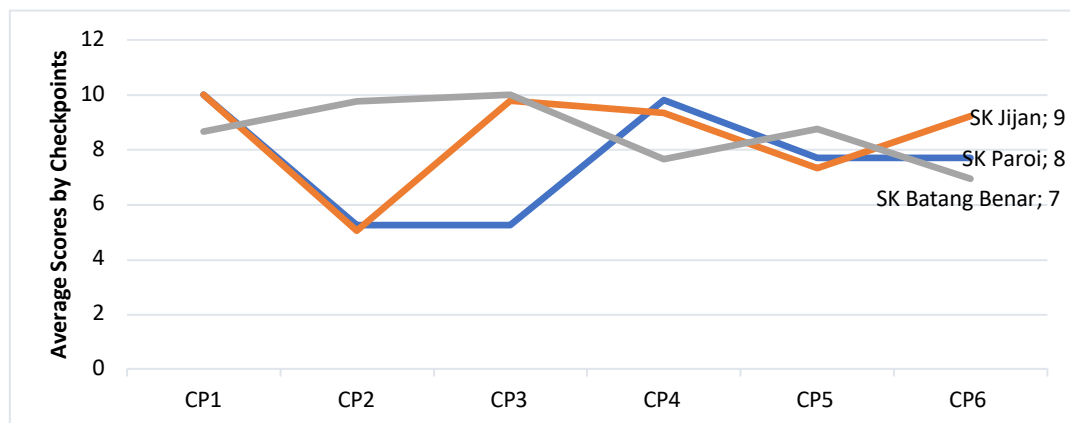
## RESULT

As shown in Table 3, the three schools have shown considerably high scores when the average score is  $M = 8.235$  ( $S.D. = 2.062$ ). Apparently, there scores among the groups from SK Batang Benar have shown more fluctuate than the other groups from the other schools (Figure 4). Apart from the location of SK Batang Benar, this study believes that the diversities of the scores are due to the number of groups which were almost double from the two schools namely SK Paroi and SK Kg. Jijan.

A one sample T-test was performed to identify the difference of scores for HalalRace among across the checkpoints. The result shows that the mean of HalalRace score ( $49.43 \pm 5.22$ ) was lower than the normal depression score of 60, a statistically significant difference of 49 (95% CI, 51.1 to 47.6),  $t(36) = -57.64$ ,  $p = .000$ , yet the difference was rather not large to be practically significant. In other words, it can be considered that each checkpoint is the way in which the students can practically learn about halal. Despite of religions and intellectual differences, HalalRace managed to reduce the gap when every member of the groups can cooperate for maximum results. Within two hours, six checkpoints were manageable considering the time limits given by the schools.

**Table 3. Distribution of Scores among Six Checkpoints According to Mean Scores and Standard Deviation**

Checkpoints	Mean	S. D.
Checkpoint 1	9.35	1.418
Checkpoint 2	7.39	2.527
Checkpoint 3	8.48	2.513
Checkpoint 4	8.64	2.406
Checkpoint 5	8.12	1.506
Checkpoint 6	7.43	2.007
<b>Overall</b>	<b>8.235</b>	<b>2.062</b>



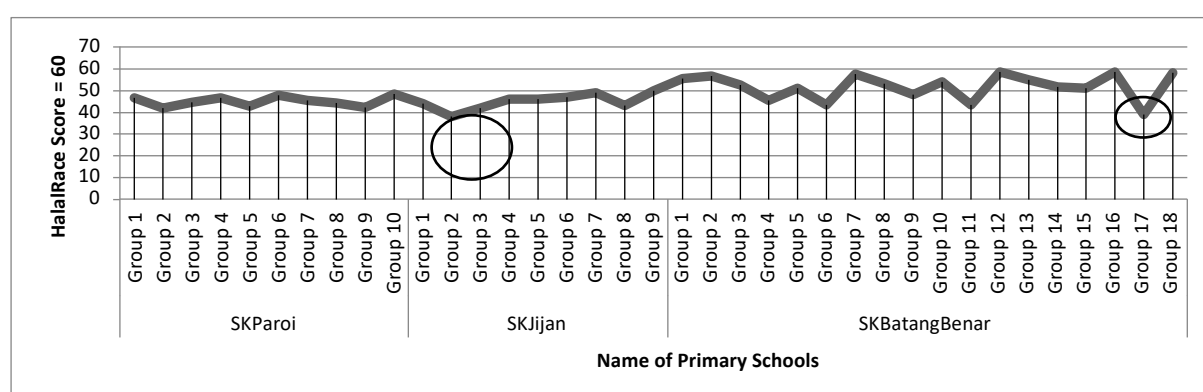
**Figure 4. Line Graph of HalalRace Scores across Six Checkpoints among Three Schools**

In addition to that, this research examines the cross tabulation of scores among the three schools. Referring to Table 4, the level of scores obtained by the three schools was high in majority. The scores from SK Batang Benar, however, indicate medium level of scores from one group only out of 18 group altogether. The percentage was rather low to suggest poor performance made by the groups from SK Batang Benar. It can be suggested that the HalalRace is practically suitable for the primary schools when 97% of the groups showed high satisfactory level of scores for the HalalRace respectively. It is found that the negotiation of interest was encouraging when the majority of the schools obtained high scores and zero was found to be at the low level of scores in HalalRace..

**Table 4. Level of HalalRace Scores across Three Schools**

Level of Scores	Schools					
	SKP		SKJ		SKBB	
	f	%	f	%	F	%
Low	-	-	-	-	-	-
Medium	-	-	-	-	1	3
High	10	27	9	24	17	46

Besides, a one-way between subjects ANOVA was conducted to compare the effect of schools on the HalalRace scores in SK Paroi, SK Kg. Jijan and SK Batang Benar condition. There was an insignificant effect of schools on HalalRace scores at the  $p < .05$  level for the three conditions [ $F(2, 34) = .514, p = .603$ ]. Taken together, these results suggest that the schools do not have an effect on the scores obtained in HalalRace game. Specifically, the findings suggest that when the game is conducted at other schools, the scores obtained by the students in HalalRace will not significantly change. This finding shows positive signal to the issues highlighted at national level that there was a great concern on the consistency in spreading knowledge and understanding of halal as well as regulation enforcement (Muhammad Hijrah et. al. (2016); Casey (2010); Molineux (2018)).



**Figure 5. Line Graph of HalalRace Scores Obtained by Each Group across Different Schools**

## DISCUSSIONS

Apparently, the structure of the HalalRace is found proficiently acceptable by the students from the primary school. The theory test and mind test become compliment to each other as a motivation to move to another stage until the end of the checkpoints. Not only theory, HalalRace provide a perfect structure from the cognitive, affective and psychomotor of analytical which promotes the whole system of body to participate in the very game. They had

joy and great experience through the journey of *explorace* by the name of HalalRace. Nestle has made full commitments in the programme through the presentation of their food experts as an elementary knowledge yet important to the primary school students.

HalalRace in 2018 provide significant remarks when the majority obtained high scores as opposed to low score which is null is ( $M= 8.235$ ,  $S.D.= 2.062$ ). Even though there was an insignificant difference shown on the three schools and the scores, it was rather very small which practically insignificant [ $F(2, 34) = .514$ ,  $p = .603$ ]. This is due to the participation of students who were from Year 5 and Year 6 which have similar level of education and exposures. However, result shows significant differences among the checkpoints when the mean of HalalRace score ( $49.43 \pm 5.22$ ) was lower than the normal depression score of 60, a statistically significant difference of 49 (95% CI, 51.1 to 47.6),  $t(36) = -57.64$ ,  $p = .000$ , yet the difference was rather not large to be practically significant.

## CONCLUSIONS

In conclusion, IHRAM made careful assessments and discussion with Nestle in identifying weakness and strength of Halal@School for every program. Improvements have always been assessed from time to time for the kit such as puzzle, fishing rod, and sticks for pressure game. IHRAM and Nestle made one step ahead in organizing such programs at schools as one of the showcases in the country. This study believes that the industries have positive perspectives to be with the academic institution in supporting the education platform in spreading knowledge and understanding of halal. Having had this analysis, a future study should include pre and post analysis for better understanding towards the interest in halal and the increase of knowledge among the students.

## REFERENCES

- Al-Hadith, Sahih Muslim, Book 1, Hadith Number 0183.
- Al-Qaradawi, Y. (1999). *The Lawful and the Prohibited in Islam (Al-Halal Wal Haram Fil Islam)*. Kuala Lumpur, Malaysia: American Trust Publication.
- Al-Quran.
- Casey, S. (2010). Halal: A growing market of caveat. *Poultry World*, 164 (6), 23-23.
- Ferrance, E. (2000). *Themes in education: Action research*. Brown University: Educational Alliance.
- Hussaini, M. M. and Sakr, A. H. (1984). *Islamic Dietary Laws and Practices*. 2nd Edition. Chicago: The Islamic Food and Nutrition Council of America (IFANCA).
- Johnson, M., & Button, K. (2000). Connecting graduate education in language arts with teaching contexts: The power of action research. *English Education*, 32, 107-126.
- Katz, N. and McNulty, K. (1995). Interest-Based Negotiation. Retrieved April 25, 2019 from <https://www.maxwell.syr.edu/uploadedFiles/parcc/cmc/Interested-Based%20Negotiation%20NK.pdf>.
- Kee Mohd Yusof, K. Y. S and Husna Johari (2014). Persepsi terhadap hubungan kesatuan sekerja dan majikan serta sikap kolektivisme: peramal kepada interest based bargaining (ibb) dalam kesatuan sekerja di sabah. *Journal of Techno Social*, 6(2).
- Leventhal, L. (2006). Implementing interest-based negotiation: conditions for success with evidence from Kaiser Permanente. *Dispute resolution journal*, 61(3), 50–58.
- Molineux, J. (2018). Using action research for change in organizations: processes, reflections and outcomes. *Journal of work-applied management*, 10(1), 19-34. doi.org/10.1108/JWAM-03-2017-0007.

- Muhammad Hijrah Abd Kadir, Raja Zuraidah Raja Mohd Rasi, Siti Sarah Omar and Zariq Imran Abdul Manap. (2016). Halal supply chain management streamlined practices: issues and challenges. IOP Conference series: materials science and engineering, 160(2016) 012070. doi:10.1088/1757-899X/160/1/012070.
- n.a. (2017). State of the global Islamic economy report 2016/17. Dubai, UAE: Thompson Reuter and DinarStandard.
- Nurulhuda Noordin, Nor Laila Md Noor, Mardziah Hashim, Zainal Samicho. (2009). Value chain of halal certification system: a case of the Malaysia halal industry. European Mediterranean conference on information systems 15.
- O'Connor, Katherine A., Greene, H. C. and Anderson, T. J. (2006). Action research: a tool for improving teacher quality and classroom practice. Retrieved from [https://www.researchgate.net/publication/234749663\\_Action\\_Research\\_A\\_Tool\\_for\\_Improving\\_Teacher\\_Quality\\_and\\_Classroom\\_Practice](https://www.researchgate.net/publication/234749663_Action_Research_A_Tool_for_Improving_Teacher_Quality_and_Classroom_Practice). Accessed at July 30, 2019.
- Ross, J., Rolheiser, C., & Hogoboam-Gray, A. (1999). Effects of collaborative action research on the knowledge of five Canadian teacher researchers. *The elementary school journal*, 99(3), 255-274.
- Sagor, R. (2004). *The action research guidebook: a four-step process for educators and school teams*. Thousand Oaks, CA: Sage.
- Sax, C., & Fisher, D. (2001) Using qualitative action research to effect change: implications for professional education. *Teacher education quarterly*, 28(2), 71-80.
- Schatzki, M. and Coffey, W. R. (2009). *Negotiation - the art of getting what you want*. USA: Signet Books.
- Shonk, K. (2019). Principled negotiation: focus on interests to create value. Program on negotiation. Harvard Law School. 19th May 2019. Retrieved August 1, 2019 from <https://www.pon.harvard.edu/daily/negotiation-skills-daily/principled-negotiation-focus-interests-create-value/>.
- Silvia, Paul J. (2001). Interest and interests: The psychology of constructive capriciousness. *Review of general psychology*, 5(3), 270-290. doi.org/10.1037/1089-2680.5.3.270
- Strategy Paper 11th Malaysia Plan.
- Trembley, J., F. (2016). From principle negotiation to interest-based bargaining. *Universal journal of industrial and business management*, 4(2), 71-79.
- Tremolada, G. (2015). Four principles of interest based bargaining. Retrieved April 2, 2019 from <https://frontlinemanagementexperts.wordpress.com/2015/06/16/4-principles-of-interest-based-negotiation>.
- Yusuf, Hatla (2012). Fleishman-Hillard launches majlis – dedicated to engagement with the Muslim market. Fleishman Hillard Majlis, 19th July 2012. Retrieved August 1, 2019 from <https://fleishmanhillard.com/2012/07/reputation-management/fleishman-hillard-launches-majlis-dedicated-to-engagement-with-the-muslim-market/>. Al-Hadith, *Sahih Muslim*, Book 1, Hadith Number 0183.
- Al-Qaradawi, Y. (1999). *The Lawful and the Prohibited in Islam* (Al-Halal Wal Haram Fil Islam). Kuala Lumpur, Malaysia: American Trust Publication.
- Al-Quran.
- Casey, S. (2010). Halal: A growing market of caveat. *Poultry World*, 164 (6), 23-23.
- Ferrance, E. (2000). *Themes in education: Action research*. Brown University: Educational Alliance.
- Hussaini, M. M. and Sakr, A. H. (1984). *Islamic Dietary Laws and Practices*. 2nd Edition. Chicago: The Islamic Food and Nutrition Council of America (IFANCA).
- Johnson, M., & Button, K. (2000). Connecting graduate education in language arts with teaching contexts: The power of action research. *English Education*, 32, 107-126.



- Katz, N. and McNulty, K. (1995). *Interest-Based Negotiation*. Retrieved April 25, 2019 from <https://www.maxwell.syr.edu/uploadedFiles/parcc/cmc/Interested-Based%20Negotiation%20NK.pdf>.
- Kee Mohd Yusof, K. Y. S and Husna Johari (2014). Persepsi terhadap hubungan kesatuan sekerja dan majikan serta sikap kolektivisme: peramal kepada *interest based bargaining* (ibb) dalam kesatuan sekerja di sabah. *Journal of Techno Social*, 6(2).
- Leventhal, L. (2006). Implementing interest-based negotiation: conditions for success with evidence from Kaiser Permanente. *Dispute resolution journal*, 61(3), 50–58.
- Molineux, J. (2018). Using action research for change in organizations: processes, reflections and outcomes. *Journal of work-applied management*, 10(1), 19-34. doi.org/10.1108/JWAM-03-2017-0007.
- Muhammad Hijrah Abd Kadir, Raja Zuraidah Raja Mohd Rasi, Siti Sarah Omar and Zariq Imran Abdul Manap. (2016). Halal supply chain management streamlined practices: issues and challenges. *IOP Conference series: materials science and engineering*, 160(2016) 012070. doi:10.1088/1757-899X/160/1/012070.
- n.a. (2017). *State of the global Islamic economy report 2016/17*. Dubai, UAE: Thompson Reuter and DinarStandard.
- Nurulhuda Noordin, Nor Laila Md Noor, Mardziah Hashim, Zainal Samicho. (2009). Value chain of *halal* certification system: a case of the Malaysia *halal* industry. *European Mediterranean conference on information systems* 15.
- O'Connor, Katherine A., Greene, H. C. and Anderson, T. J. (2006). *Action research: a tool for improving teacher quality and classroom practice*. Retrieved from [https://www.researchgate.net/publication/234749663\\_Action\\_Research\\_A\\_Tool\\_for\\_Improving\\_Teacher\\_Quality\\_and\\_Classroom\\_Practice](https://www.researchgate.net/publication/234749663_Action_Research_A_Tool_for_Improving_Teacher_Quality_and_Classroom_Practice). Accessed at July 30, 2019.
- Ross, J., Rolheiser, C., & Hogoboom-Gray, A. (1999). Effects of collaborative action research on the knowledge of five Canadian teacher researchers. *The elementary school journal*, 99(3), 255-274.
- Sagor, R. (2004). *The action research guidebook: a four-step process for educators and school teams*. Thousand Oaks, CA: Sage.
- Sax, C., & Fisher, D. (2001) Using qualitative action research to effect change: implications for professional education. *Teacher education quarterly*, 28(2), 71-80.
- Schatzki, M. and Coffey, W. R. (2009). *Negotiation - the art of getting what you want*. USA: Signet Books.
- Shonk, K. (2019). Principled negotiation: focus on interests to create value. *Program on negotiation*. Harvard Law School. 19<sup>th</sup> May 2019. Retrieved August 1, 2019 from <https://www.pon.harvard.edu/daily/negotiation-skills-daily/principled-negotiation-focus-interests-create-value/>.
- Silvia, Paul J. (2001). Interest and interests: The psychology of constructive capriciousness. *Review of general psychology*, 5(3), 270-290. doi.org/10.1037/1089-2680.5.3.270
- Strategy Paper 11<sup>th</sup> Malaysia Plan.
- Trembley, J., F. (2016). From principle negotiation to interest-based bargaining. *Universal journal of industrial and business management*, 4(2), 71-79.
- Tremolada, G. (2015). *Four principles of interest based bargaining*. Retrieved April 2, 2019 from <https://frontlinemanagementexperts.wordpress.com/2015/06/16/4-principles-of-interest-based-negotiation>.
- Yusuf, Hatla (2012). Fleishman-Hillard launches majlis – dedicated to engagement with the Muslim market. *Fleishman Hillard Majlis*, 19th July 2012. Retrieved August 1, 2019 from <https://fleishmanhillard.com/2012/07/reputation-management/fleishman-hillard-launches-majlis-dedicated-to-engagement-with-the-muslim-market/>.

# Assessing 6C's Pedagogy Deep Learning Attributes Using Exploratory Factor Analysis Among School Teachers in Malaysia

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## Abstract

The best teaching and learning strategies involve teachers' understanding of the need for students to learn and provide deep learning. Teachers need to identify the characteristics to make the education system successful and sustainable. There are various attributes that are often discussed in producing the best exploration in teaching practice involving teachers competence. Accordingly, this quantitative study involving 582 teachers was conducted aimed at assessing aspects of deep learning competency among teachers consist of 6 measurement attributes known as 6C's. Data were analyzed using inference statistics for the exploratory factor analysis (EFA) using AMOS Version 23. The finding of reliability showed that the cronbach alpha for all constructs was high at 0.983. For the exploratory factor analysis using varimax rotation, the results show a 6 factors solution with Eigen value greater than 1.0. A KMO (Kaiser-Meyer-Olkin) value of 0.979 > 0.6 indicated that these items were adequate for inter-correlation while the Barlett Test was significant ( $p < 0.05$ ). By using the principal component analysis method, the anti-image (Measure of Sampling Adequacy (MSA) value for item correlation was greater than 0.5. The value of the variance explained by these 6 factors equals 78.68%. The overall findings indicate that the instrument developed to assess the attribution of deep learning competencies among teachers is appropriate for use in future research.

**Keywords:** *Exploratory Factor Analysis, Deep Learning*

## INTRODUCTION

The current scenario of education is through a process of change that involves physical, mental and emotional acceptance. Changes in education today require new skills to meet the increasing challenges of lifelong learning (Zahiah Binti Kassim & Abdul Razaq Bin Ahmad, 2010) especially in connecting students with the real world. In this regard, planning for The Big Idea implemented in the learning element is seen as a connection that opens with students experiences both inside and outside of the classroom and thus engages students' interest, imagination and engagement.

As such, the Ministry of Education Malaysia (MOE) is striving to increase the quality of student and quality education in the pursuit of producing human capital. Thus, in the current stream of information procurement, various inputs have been deployed so that each learner has aspirations of the vision and mission of education so that the current education system does not have a passive effect on the pupils.

It is common knowledge that the latest approaches are being made in the pursuit of providing the best education to the pupils and thus positively impacting the students. The previous study

found that 49% of students were bored during the study session, 17% were bored in each class, which is equivalent to 2/3 who were bored in class daily (High School Survey of Student Engagement (HSSSE), Indiana University, 2010). What if the education system today is still as old as the countries that have adopted various aspects of technology such as smartphones with information at their fingertips. We see how the education system is, to this day, our students still cannot think creatively and critically with high level skills and use outdated approaches.

A wide range of support has been studied to see how effective the technology is in the field involved (Wartella, 2015). Nowadays, students are more exposed to learning that enhances their potential and gives them motivation to continue learning and motivates students to come to school. Efforts to study every aspect of technology should be a priority in order for the youth to delve into current technological advances and skills. This is because, there are many aspects that need to be taken into consideration in order for technology interaction to be well understood by all individuals in the field of education. This effort is to emphasize changes in the field of education in order to promote excellence and equality for all and to prepare for excellence (Sara Asmawati Shariffuddin et al., 2016). In addition, it is important to see this deep learning as an act that involves the active participation of pupils in learning through authenticity and dedication.

As discussed before, the previous study found that 49% of students were bored during the study session, 17% were bored in each class, which is equivalent to 2/3 of the boredom in the classroom each day. This previous study was conducted by the High School Survey of Student Engagement (HSSSE), Indiana University, 2010. This is taken seriously when changes need to be made in a culture that involves teacher competence so that each student can be promoted to the same level of excellence and equity for all and involve the process. A high degree of cognitive ability to achieve a deep understanding of contemporary content and issues. Every teacher needs to see this as an issue of how to increase student engagement in learning through their individual and collective activities and thus build skills, knowledge, self-confidence and self-efficacy through inquiry to make learning sessions more deep and creative teaching (Brinkman 2010).

The importance of issues related to teacher professional competence is also evident in various studies that have been conducted that specifically emphasize the elements used to measure a teacher's professional competence (Kunter et al., 2013). In addition, issues related to **BIG IDEA** are often translated in the context of education covering a discipline in an effort to generate more thought, exploration and discovery. They are all about the knowledge of what students need to know and what skills students can develop. In line with this issue, it should be a teaching force at the Malaysian Teacher Education Institute that trains teachers to drive academic excellence, apply best practices in the implementation of management and leadership as well as pedagogy in teaching and learning in line with the goals of the Education Development Plan. Malaysia (PPPM) 2013-2025.

The purpose of this study was to identify the 6C's attributes of deep learning instruments among teachers that encompass six elements of critical thinking, creativity, communication, personality, citizenship and collaboration using exploratory factor analysis.

## METHODS

This study is a study that has quantitative design by survey. Specifically, this study examines the fit of the measurement model hypothesized with the data obtained and determines reliability and convergence validity, discriminant validity and construct validity by using

exploratory factor analysis for each of the 6C attributes found in deep learning competencies. The study sample included 582 randomly selected school teachers teaching in primary and secondary schools classified as TS25 (School Transformation 2025) schools in the central and southern zones in Malaysia.

Each sample is required to answer an online questionnaire consisting of 37 items built with IPG lecturers and TS25 master trainers. The early instruments were reviewed in terms of adjustability of language, objectives, constructs and content with competent consultant services in the areas of education, assessment, teaching and learning and curriculum. Responses were measured using a 7-point Likert scale with strongly disagree to strongly agree. The questionnaires consisted of two sections on the demographic section and the deep learning competency section 6C's.

### **Data Analysis and Instrument Reliability**

This study involved 37 items comprising 6 attributes of deep learning competence (6C) namely critical thinking, creativity, communication, personality, citizenship and collaboration. All 37 items listed in this instrument were evaluated using a 7-point Likert scale.

The study data were analysed using inference statistics involving factor analysis in the early stages after validity and reliability were considered. Each attribute needs to meet the requirements of validity and reliability as suggested by Byrne (2010), Hair et al. (2010) and Brown (2006). Once all of these items were examined, no items were dropped in the instrument. A minimum of three construction items were adhered to by the recommendation of Hair et al. (2010).

The use of the corrected item-total correlation method was also used in this study to aim for consistency among subdomains within the entire domain (Hair et al. 1995). For values greater than 0.30, it is expressed as the most appropriate value for corrected item-total correlation. Whereas for values obtained less than 0.30, the impression that the item measures something completely different from the existing domain (Hair et al. 1995).

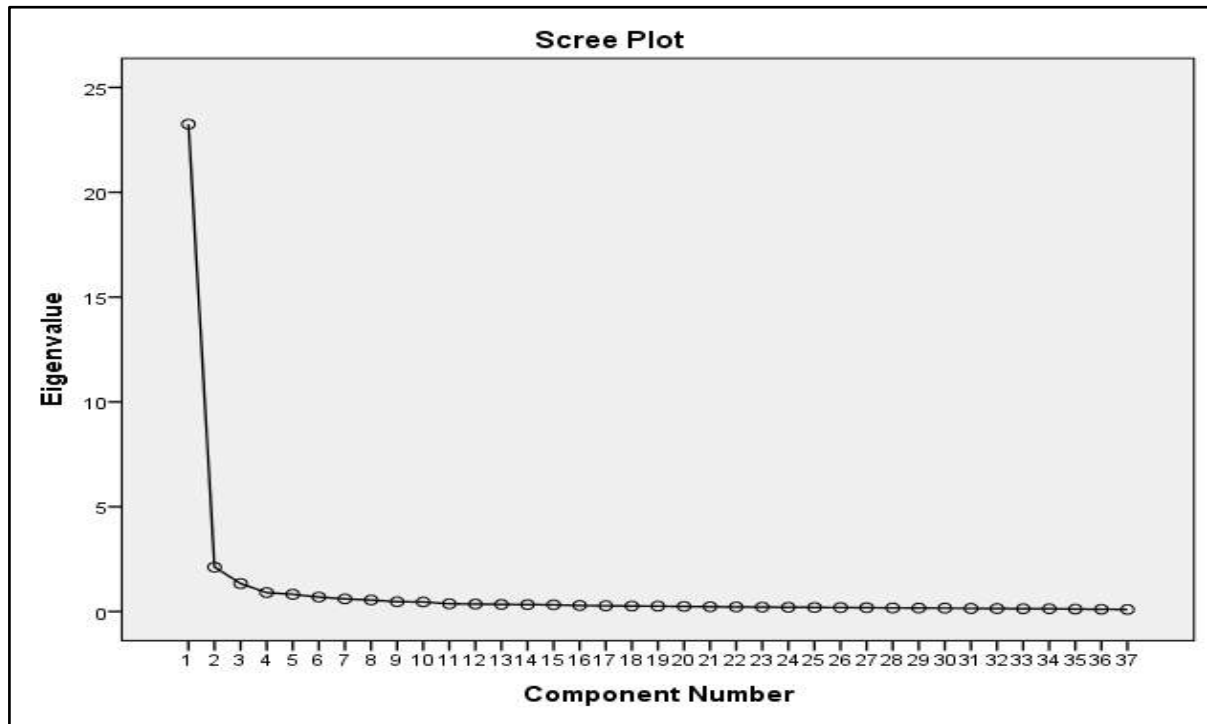
## **FINDING AND DISCUSSION**

To test and evaluate the instruments of deep learning components, this research has used exploratory factor analysis (EFA) methods to explore the components. The cronbach alpha coefficients have been used to assess the internal consistency of these instruments. Exploratory factor analysis using Principal component analysis (PCA) technique was used to determine the total number of factors resulting from the 37item analysis. Technically, PCA is used to analyse components and is the default method of various statistical software for factor analysis procedures. According to Table 1 , some Goodness of fit index using Fit index of exploratory factor analysis (EFA) must be fullfilled to help researchers to interpret factors involved in the research.

**Table 1 : Goodness of Fit of EFA**

EFA Index	Recommended Value Criteria
<i>Sphericity Bartett's Test</i>	< 0.05
<i>Kaiser-Meyer – Olkin (KMO)</i>	≥ 0.50
Factor Loading	≥ 0.50
<i>Communalities</i> )	≥ 0.30
<i>Eigen Value</i>	≥1.00
% contribution of variance to factor	≥ 3.00

In Figure 1 results, the first twenty four principal components have eigenvalues greater than 1. These components explain 78.68% of the variation in the data. The scree plot shows that the eigenvalues start to form a straight line after the second principal component.



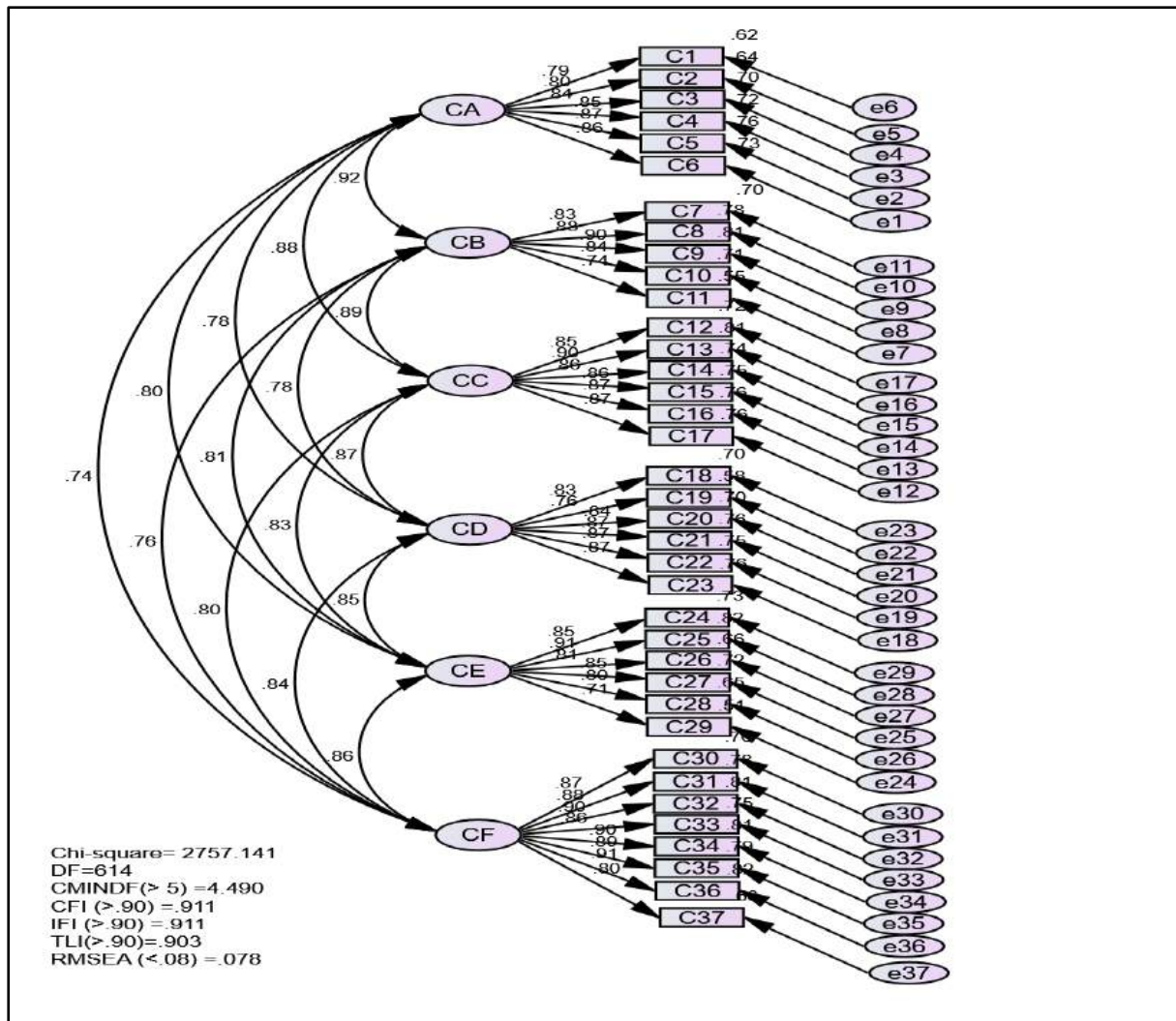
**Figure 1 : Scree Plot Of Variable To Component**

The results of this exploratory factor analysis using the oblique rotation method (promax) found that there were six successfully formed attributes each representing several items of no less than 3 items such as a minimum of three construction items according to the recommendation of Hair et al. (2010). Meanwhile the internal consistency reliability values using the Cronbach alpha coefficient showed a good coefficient of 0.983 by the whole construct. For each construct, it was found that the 6C construct for critical thinking gave a coefficient of 0.932, creativity with a reliability coefficient of 0.921, communication with a value of 0.948, personality with a value of 0.933, citizenship with a value of 0.924 and collaboration with a reliability coefficient of 0.963.

In the meantime, to determine the suitability of the measurement model, IBM SPSS AMOS software version 23.0 is used for quality analysis and model matching procedures. Figure 2 shows the EFA output of the original measurement model hypothesized from the outset to see how each attribute fits into a deep learning tool. Several fit indices were generated to determine the fit of the measurement model. The three goodness-of-fit index (ILI) (0.911), (CFI) (0.911), and Tucker-Lewisfit index (TLI) (0.903) showed values greater than the 0.9 fit values recommended by Bagozzi and Yi (1988).

Although the normed chi square index ( $\chi^2 / df$ ) shows a value of 4.490, it is still acceptable because it does not exceed 5.0 (Marsh & Hocevar 1985). Similarly, the root mean square error of approximation (RMSEA) (0.078) does not exceed 0.08 and is still acceptable because it is within 1.0 (Browne & Cudeck 1992). The above discussion shows that no item of low factor loadings should be dropped or modified by the researcher for the purpose of the study. It is well known that low factor loadings affect the reliability and validity of the model (Hair et al. 2014; Zainudin 2016). Figure 2 shows a final measurement model showing all items

maintained with factor loadings above the recommended level of 0.6 and still showing data compatibility.



**Figure 2 : The Fitness Of Measurement Model Using Exploratory Factor Analysis**

From the findings of the EFA exploratory factor analysis, the six attributes of the learning constructs are mutually exclusive without any multicollinearity problem. Therefore, it can be concluded that there is a consistent model of deep learning competency measurement among teachers in the TS2025 School Transformation school with the survey data obtained. This indicates that all 37 items retained in the model are suitable and capable of measuring new assessment concepts intended in deep learning that focus on the 6C's element (Hair et al. 2014).

As such, this study is important because the type of assessment that teachers rely on has a significant impact on teaching practice (Acts & Rohaida 2014). We are aware that teaching and learning methods of teacher delivery directly determine student achievement (Kaiser et al. 2014; Subsidies & Stories 2016). Therefore, in deep learning, the key determinant of learning is the acquisition of new competencies that connect students with the real world so that efforts to change teaching practices have always been critical of preparing students for the examination (Pellegrino 2002; Salmiah et al. 2013).

## CONCLUSIONS

Based on the internal consistency values for reliability and factor analysis (EFA) conducted for learning competency instruments, it was found that these instrument could be validated and used for further study. Such a study design to create deep learning competency relationships among teachers with some of the constructs identified to impact teaching and learning, assessment, effectiveness and so on. In addition, the exploratory factor analysis results also indicate that factor analysis on the item is appropriate and qualifies to carry out the next analysis, which is the validation factor analysis. This study is compatible with other data sets conducted by other researchers. The findings obtained from testing other samples can further confirm the reliability and validity of this study in the future.

## REFERENCES

- Bagozzi, R.P. & Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*
- Brinkman, D. J., 2010. Teaching creatively and teaching for creativity. *Arts Education Policy Review*, 111. ISSN: 1063-2913.
- Browne, M.W. & Cudeck, R. 1992. Alternative Ways of Assessing Model Fit. *Sociological Methods & Research* 21(2)
- Byrne, B.M. 2001. *Structural Equation Modelling with AMOS. Basic Concepts, applications and programming*. 2<sup>nd</sup> ed. Mahwah, NJ: Lawrence Erlbaum Associates.
- Creswell, J.W. 2014. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. Essex: Pearson Education..
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. 2014. *Multivariate Data Analysis*. Ed. ke-7. Essex: Pearson Education Ltd.
- Kaiser, G., Blömeke, S., Busse, A., Dörmann, M. & König, J. 2014. Professional knowledge of (prospective) mathematics teachers – Its structure and development. *Cuadernos de Investigación y Formación en Educación Matemática*
- Kamisah, O. & Rohaida, M.S. 2014. Editorial. Science Technology, Engineering and Mathematics (STEM) education in Malaysia. *Eurasia Journal of Mathematics*
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. 2013. Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*.
- Pellegrino, J.W. 2006. Rethinking and redesigning curriculum, instruction and assessment: What contemporary research and theory suggests. A Paper Commissioned by the National Center on Education and the Economy for the New Commission on the Skills of the American Workforce
- Salmiah, J., Ramlah, H., Ab. Rahim, B. & Abdullah, R.M. 2013. Acceptance towards school based assessment among agricultural integrated living skills teachers: Challenges implementing a holistic assessment. *Journal of Technical Education and Training*
- Lauricella, A. R., Wartella, E. A., & Rideout, V. J. 2015. Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology*
- Zahiah Kassim & Abdul Razaq Ahmad. 2009. *E-Pembelajaran: Evolusi Internet dalam Pembelajaran Sepanjang Hayat*: UKM
- Zainudin, A. 2016. *SEM Made Simple: A Gentle Approach to Learning Structural Equation Modeling*. Bandar Baru Bangi: MPWS Rich Publication Sdn. Bhd.

# Expert System Model of Forward and Backward Chaining Methods to Detect Student Academic Stress Level

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## Abstract

This study aims at producing a valid and reliable expert system to detect student stress levels and how to overcome them. This is an R&D (Research and Development) beginning with the development of a Student Academic Stress Scale which was also valid and reliable. Then it was designed in the form of an expert system application of forward and backward chaining models. Through this expert system, students can measure their own academic stress levels and simultaneously found solutions to the high and low stress levels. The research took place at IAIN Batusangkar with a total sample of 376 students from a population of approximate 6500 students. The samples were taken by representatively and proportionally stratified cluster random sampling technique, and the size is based on Slovin formula. The research is still in progress, reaching step 5 of the 10 planned R&D steps. Academic Stress Scale trial results obtained 48 valid items from 58 items with a reliability level index of .785. It shows that students' academic stress levels tend to be comparative that the semester VI and VIII students' stress levels are higher than those in semester III and V, which is as much as 47.76% in high category. This may have something to do with the guidance or completion of the thesis because it needs an expert system as a means of measuring and managing stress.

**Keywords:** *Academic Stress, expert system, forward and backward chainings*

## INTRODUCTION

Stress can be experienced by everyone including students. Stress on students is generally caused by academic assignments. Therefore student stress is called "academic stress" which is influenced by many factors, such as overloaded college assignments, excessive activities outside of academic activities, choice of thesis titles have not been approved by the Academic Advisor or the Head of the study program, and by the difficult thesis guidance. As Kalhoun and Acocela of Georgia University stated that students, even though they are considered intellectuals, whose stress level tends to increase alarmingly from year to year because of the demands of success, both from the college itself and from parents. Especially for students whose parents have never attended college and have high expectations by investing their money in the success of their children, can trigger tremendous academic stress for the students.

In line with that, Rindang (2006: 451) also suggested that students who are writing thesis are very susceptible to stress. Stressed students tend to experience disturbances in physical, emotional, cognitive, and behavioral functions. The same condition is certainly also experienced by students in various universities in Indonesia, including in IAIN Batusangkar.



Although stress can cause despair, it can be analogous to a horse that has strong energy. When the horse is not well controlled, the energy possessed will be wasted and used for useless things. When someone is able to use stress energy positively it will be a strong motivation to realize expectations (Ebrahimi, 2013: 509).

One of the factors that can cause stress on the students who compose their thesis is a less harmonious interpersonal relationship with the supervisor. This condition can be influenced by the inability to perform obligations as a student due to the high complexity of the problems faced (Rini, Kartika, & Qurroyzhin, 2007: 121). This is also caused by students' internal and external factors. Internally, the emotional condition of students is influenced by academic abilities, health, interests, attention, low resilience abilities, and other psychological conditions. While externally it can be influenced by environmental conditions, both households, the campus environment and the community.

This phenomenon also occurs to students who are in the final stage of completing their final assignment at the State Islamic Institute (IAIN Batusangkar). Based on data from the Batusangkar IAIN Counseling Guidance and Services Unit (UPT LBK), in each semester, students are found to be constrained in completing their final assignments with a variety of causative factors which can lead to stress on students. Symptoms include insomnia, anxiety, and some other physical and psychological symptoms (UPT LBK IAIN Batusangkar).

Several studies of stress on final year students reveal that students who are constrained in completing the final project tend to show symptoms of stress with various symptoms and levels (Rahmawati, Wati, S., & Anggraini, U .: 2015). This research is more focused on describing the results of identification of the stress levels of students and the solutions that have been carried out by UPT LBK as one of the units responsible for dealing with problem students. The output of this study is a valid instrument for detecting student stress levels and the applications for detecting stress levels more practically with expert systems using "artificial intelligence". The results of the identification obtained through the research will be used as a need analysis to develop a model for detecting stress levels of students using the forward chaining and backward chaining methods.

There are three components that need to be understood in exploring stress theory, namely stressors, processes (interactions), and stress responses. Stressors are situations or stimuli that threaten an individual. Stress response is a reaction that arises, while the stress process is an interactive mechanism starting from the beginning of the stressor until the stress response appears (Helmi, 2000 in Safaria & Saputra, 2009: 27). Stress is a situation that makes tense when someone gets a problem or challenge having no way out, or many thoughts that interfere to be done (Zimbardo, 1985: 456 and Safaria & Saputra, 2009: 27). He explained that stressor stress is a situation or stimulus and threatens one's well-being, for example family problems, conflicts with other people, and too many tasks.

Moreover, the process of interaction between the stressor and the response depends on the characteristics of the individual who is experiencing the stress. Most stress reactions tend to be negative, such as dizziness, high blood pressure, irritability, sadness, difficult sleeping, difficult to concentrate, decreased appetite, excessive smoking, and others. When a negative stress response is not managed properly it can cause problems that harm oneself or others. For example the use of illegal drugs (psychotropic drugs), behaving aggressively, damaging the environment, mistreating selves, even suiciding. Although there are also positive responses, for example making stress a motivation to move forward or stop action because it is not profitable.

In the Book of Mental Nursing by Iyus and Titin (2014: 49) there is a quote from Taylor (1997: 755), stress is a term derived from the Latin word "stringere" which means "hard" (stricus). Mc Nemey in Grenberg (1984), mentions stress as a physical, mental, and chemical reaction from the body to situations that are frightening, surprisingly confusing, dangerous, and worrying about someone.

Hartono (2007: 9) argues that stress is a non-specific human reaction to stimulation or pressure (stimulus stressor). Stress, as an adaptive reaction, is very individual, so a stress for someone is not necessarily the same response for others. This is very much influenced by the maturity level of someone's adaptation to his/her environment. According to Ide (2008: 10), stress is also an alarm system in the human body that indicates a condition that must be answered or responded to and stress is also a psychophysical condition experienced by someone when facing a challenge. Both opinions above explain that stress can encourage someone to do something. The problem is the direction of movement is positive or negative.

Psychologists divide stress into two forms. First; harmful and destructive stress which is called distress. Second; positive and beneficial stress called eustres (Sarafino, 1998 in Safaria & Saputra, 2009). Moreover, health experts, Molloy (2010: 116), suggests three types of stress. First; anticipatory stress, which is being anxious about something that has not happened. For example, a student will have a seminar proposal next two weeks, but the student has begun to worry about it. Second; stressful situations when there are threats. For example, someone who is driving a car experiences a slip on a wet road. Usually this is external pressure such as accidents or sadness. Third; there is chronic stress that is commonly experienced over a long period of time and can include stress from difficult work environments or unhealthy relationships. The first type of stress is supposed to happen to every student. If not, the students often neglect to prepare what should be displayed in the seminar. As a result, the display is not optimal. The second type of stress is human, because every human being has feelings. The third type of stress that is not expected, because it can interfere with physical health such as a chronic stress. This type of stress can cause psychosomatic and physical disorders.

According to Greg (2002: 16) there are reactions that are experienced from stress symptoms, namely (a) emotional reactions, (b) physical reactions, (c) behavioral reactions, and (d) stress symptoms. The most important changes to watch out for are increased tension, aggravation, and moodiness. Some characteristics of emotional reactions to stress in general; feeling depressed, feeling tense and not relaxed, feeling mentally exhausted, constantly feeling fear and worry, increasing irritation and complaints, feeling there is conflict, frustration and want to be angry, anxious, increasingly unable to concentrate or resolve problems quickly, often crying, becoming more fussy, depressed, or suspicious, difficult to make decisions, the desire to run and hide, afraid of fainting or sudden death, fear of embarrassment or failure, reduced ability to feel happy or happy.

Facing a series of strong emotions, the body will react in order to survive at times that endanger life. Characteristics of physical reactions to stress: tense muscles, rapid and irregular heart beats, faster and shorter breathing, sweating, increased vigilance, enlarged pupils, weakened or vibrating muscles, changes in appetite, nausea, insomnia, headaches, nervousness, weak hands and feet, indigestion, frequent urination, shortness of breath, indistinct pain, constipation or diarrhea, fatigue and weakness, old worsening pain, restlessness and constant anxiety, back pain, tingling, dry mouth and throat, and stomach prickling.

Behavior of people who are stressed can change quickly. Usually they don't like to be alone and seek the help of family or friends. The characteristics of behavioral reactions to stress are: need to calm the heart and are often doubtful, thoughts are fickle, cry easily, cranky, like to

complain, often expect others to understand them, be gentle to be fierce and aggressive, relax become stiff. According to Musradinur (2016), someone who is experiencing a stress disorder has symptoms such as: First; physical symptoms include; fatigue, harder heartbeat, dry lips, sometimes difficulty breathing, no appetite, cold sweating even though not after activity, tremors in the hands. Second; psychical symptoms including; fear without a clear reason, irritable, difficult to rest, easily offended, restless, unable to feel positive feelings, sad and depressed, hopeless, feeling life is not useful. Third; behavioral symptoms include; overreacting to a situation, feeling uninspired to do an activity, losing interest in everything, not having the motivation to live, and tend to be resigned / apathetic.

Forward Chaining and Backward Chaining are two reasoning techniques that are often used in expert systems. Forward Chaining is a decision-making strategy starting from the premise (facts) to the conclusion (final conclusion). In this method the interpreter's rules match the facts in the database with the situation stated in the antecedent or the "if" rule. If the facts in the database are in accordance with the if rules, then the rules are stimulated. This process is repeated until results are obtained as shown in the following table:

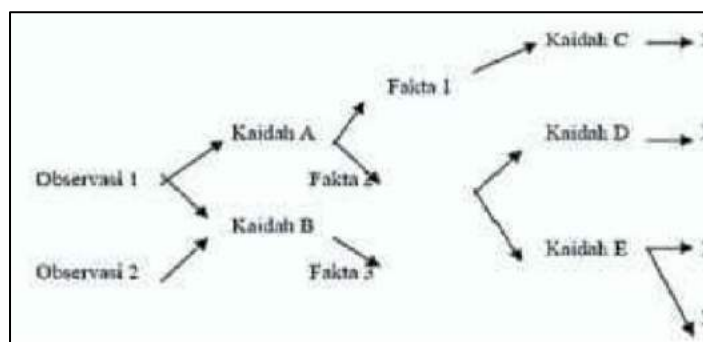


Figure 1. Forward Chaining Process (Kusrini, 2009)

Backward Chaining (backward tracking) is a decision-making strategy starting from finding solutions from conclusions then tracing the facts to find a solution that matches the facts given by the user (Kusrini, 2009). Backward tracking is an approach driven by goals. In this approach tracking starts from the destination, then looking for rules that have these objectives to make conclusions.

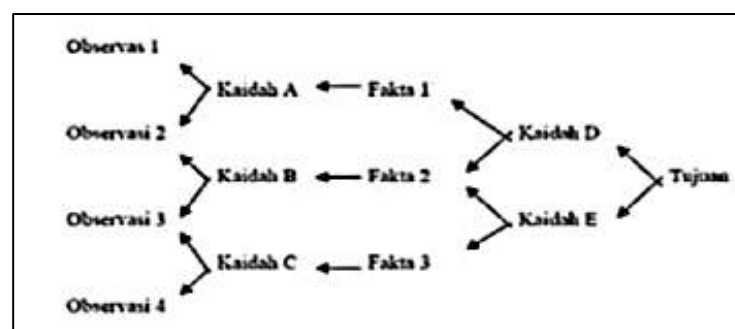


Figure 2. Backward Chaining Process (Kusrini, 2009)

## METHODS

The type of research used is research and development (abbreviated as R & D), which is the research method used to produce certain products and test the effectiveness of these products (Sugiyono, 2018). The product to be produced from this research is an expert system (expert

system) to measure stress levels and at the same time a solution to that stress. The expert system developed is using the Forward Chaining and Backward Chaining methods. The R&D steps used were taken from Brog and Gall, covering 10 steps as follows; (1) library study, (2) preliminary study, (3) Stress Scale design, (4) scale validation, (5) scale revision, (6) expert system design, (7) system trial, (8) system revision, (9) recommended expert systems, and (10) wider use of expert systems (dissemination).

The source of research data is Batusangkar IAIN students. The total population is 6,500 students, with a total sample (planned) of 376 students. Because this research is still in process, there are 67 temporary samples. The data collection instrument used was the Stress Scale that was designed by the researcher himself. The steps of making instruments (stress scale) are: (1) Making operational definitions of stress, (2). Making a grid, (3) Writing a scale item, (4) Validating a grid and a stress scale system with two psychologists, (5) Trying out a scale that aims to analyze the index of all items using SPSS. The items taken are items that have a correlation coefficient index  $\geq 0.30$  (Source Azwar. S. 2012: 164).

## RESULTS

The initial draft of the instrument totaled 58 items, then after total-analysis analysis, the instrument shrank to 48 items. This means that there are 10 items whose correlation coefficient (r)  $< 0.30$ . (However, because this research is currently underway, there is a possibility that the numbers will change as a result of the addition of the try out sample.) Furthermore, the instrument for which 48 items were calculated is based on the following formula.

$$r_{xy} = \frac{N \cdot \sum XY - \sum X \cdot \sum Y}{\sqrt{[(N \cdot \sum X^2 - (\sum X)^2)][(N \cdot \sum Y^2) - (\sum Y)^2]}}$$

Based on this formula, the coefficient  $r_{xy} = 0.785$  is obtained. The figure shows that the reliability level of the Academic Stress Scale produced is reliable and valid as the data in the following table:

**Table 1. Result of Analysis**

No	Value	Validation	No	Value	Validation	No	Value	Validation
1	.078	X	21	.395	√	41	.409	√
2	.352	√	22	.452	√	42	.402	√
3	.159	X	23	.496	√	43	.379	√
4	.380	√	24	.535	√	44	.218	X
5	.387	√	25	.437	√	45	.538	√
6	.109	X	26	.362	√	46	.409	√
7	.379	√	27	.181	X	47	.378	√
8	.346	√	28	.323	√	48	.406	√
9	.324	√	29	.323	√	49	.627	√
10	.403	√	30	.436	√	50	.446	√
11	.336	√	31	.419	√	51	.306	√
12	.334	√	32	.372	√	52	.124	X
13	.121	X	33	.243	X	53	.378	√
14	.398	√	34	.389	√	54	.086	X
15	.130	X	35	.446	√	55	.374	√
16	.373	√	36	.386	√	56	.387	√
17	.524	√	37	.434	√	57	.324	√
18	.360	√	38	.406	√	58	.070	X
19	.361	√	39	.421	√	√ = Valid Item		
20	.347	√	40	.555	√	X = Invalid Item		

The results of the identification of stress levels of students were obtained through an instrument to measure stress levels filled with research samples of 67 students. Based on the data obtained, it is known that the stress levels of students obtained by 37 students (55%) are in conditions of high academic stress levels. The remaining 30 students (45%) students are at low academic stress levels.

## CONCLUSIONS

The conclusion of the research was that the instrument for measuring the stress level of IAIN Batusangkar students was in the reliable and valid categories. The results of identification of the level of student stress based on the mean obtained as much as 47.78% of students are in a condition of high academic stress level and as much as 52.22% are at a low level of academic stress. However, if based on the median of students who are in the category of high academic stress as much as 55% and low 45%.

## REFERENCES

- Azwar, S. 2012. *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Belajar
- Hartono, L.A. (2007). *Stres & Stroke*. Yogyakarta: Kanisius.
- Ide, P. 2008. *Yoga Stres*. Jakarta: Elex Media Komputindo.
- Kusrini. 2008. *Aplikasi Sistem Pakar Menentukan Faktor Kepastian Pengguna dengan Metode Kuantitatif Pertanyaan*. Yogyakarta: Andi.
- Musradinur. (2016). *Stres dan Cara Mengatasi Dalam Prespektif Psikologi*. Jurnal Edukasi, 2 (july), 183-200.
- Rahmawati, Wati, S., & Anggraini, U. (2015). *Sistem Pakar Untuk Menganalisis Tingkat Stres Pada Mahasiswa Tingkat Akhir Dengan Menggunakan Metode Dempster – Shafer*. Sistem Informasi STMIK PalComTech, 1–13.
- Safaria, T dan Saputra, N.E. 2009. *Managemen Emosi*. Jakarta: PT Bumi Aksara.
- Zimbardo, P.G. 1985. *Psychology and Life*. USA: Scott, Foresman and Company.

# The Influence of Family in Adolescent's Halal Cosmetic Buying Behavior

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## Abstract

The growth of the world's Muslim population and increased income in Muslim-majority countries that show positive trends have brought a significant increase in demand for halal products globally, including halal cosmetic. Halal cosmetics products are currently on the rise in the Asia Pacific region, including in Indonesia. In Indonesia, one of the halal cosmetic product in recent years show 50% sales growth a years, others only no more than 10%. One of factor that influences purchasing behaviour is the reference group. The reference group has several types of influence that can be a force to influence buying interest and the use of certain goods or services (brand selection). Thus, reference groups are often used by marketers as part of marketing communication. Family (parents, siblings) is one of reference groups. This study aims to determine whether siblings influence the purchasing behavior of halal cosmetics, and find out how much they affect. This research is quantitative research, 200 halal cosmetic users. The data obtained is processed using simple regression. From the results of the regression test the influence of the parent & siblings, sequentially is 15.7%, and 18.4%.

**Keywords:** *Contextual learning and teaching, friendship network pattern*

## INTRODUCTION

According to Kotler (2002) consumer purchase behavior is influenced by cultural factors, social, personal, and psychological; therefore, some practices in Western countries for example, cannot simply be applied in Islamic countries (Schiffman et al., 2012) because of the religious teachings that has Become a culture has a very strong influence on human behavior. Product unauthorized or illegitimate would be very difficult, to sell to Muslim consumers for Muslim consumer behavior is largely governed by a shared understanding of what is allowed and what is forbidden by Islamic law.

The growth of the world's Muslim population and increased income in Muslim-majority countries that show positive trends have brought a significant increase in the demand of halal products globally (Endang, 2014). If previously the halal product market was considered limited and not profitable, currently halal products have been able to become popular that are used by several countries to increase foreign exchange (Endang, 2014). One of the halal products that currently developing into a positive trend is halal cosmetic products. The demand for halal cosmetic products in the Asia Pacific region has experienced a significant increase (www.gomuslim.co.id 2016), including in Indonesia.

Indonesia as a country with the largest Muslim population in the world. Based on data from the Central Statistics Agency (BPS) in 2010 the population of Muslims in Indonesia reached 237.6 million or around 87 percent. Indonesia is also one of the countries with a high Muslim consumer population of 13% of the world's total Muslim population (Pew Research Center,

2010). With the largest Muslim population in the world, coupled with a high Muslim consumer population, Indonesia is a potential market for halal cosmetic products.

The demand of halal cosmetics are increasingly in the world market. The global halal cosmetics market is projected to reach USD54 billion or around IDR783 trillion by 2022 and reach USD90 billion or IDR1,305 trillion (exchange rate of IDR14,500).

Indonesia's first Halal cosmetics was Wardah Kosmetik, since 1995. In the past few years Wardah have always ranked first in every survey regarding halal cosmetics. Even in one economic news website it was reported that the growth of cosmetics sales reached 50% every year, while other products were not more than 10%. Their revenue at least 200 billion per month go beyond the other two cosmetics which were only in the range of 400 - 600 billion per year (Handayani, 2016).

Increasing income trigger purchasing power in halal cosmetics. Purchasing decision also influenced by a reference group. According to Sumarwan (in Jayawijaya, Arifin & Sunarti, 2017) the reference group is an individual or group of people that significantly influences a person's behavior. The reference group influences buying interest and the use of certain goods or services, as well as brand selection. Reference groups are often used by marketers as part of marketing communication. The strategy for choosing the right reference group in marketing communication is needed so it will be able to increase sales. The wrong reference group selection will result in a failure in marketing communication which leads to failure to increase sales.

Reference groups are an important aspect in the study of consumer behaviour. Escalas & Bettman (Schulz, 2015) said that extensive research has shown that individuals often make consumption choices that are influenced by their various reference groups. Reference groups can also influence how the individual feels towards certain products or brands (Ramanathan and McGill, 2007) and can even influence the consumption choices the individual makes (Tanner *et al.*, 2008). Some reference groups may exist solely around the consumption of a certain brand or product (Muniz and O'Guinn, 2001). However, they more typically are composed of friends, co-workers and family members (Epp and Price, 2008; Kaufmann *et al.*, 2012).

One of the popularised reference group is: family (parents, siblings). Family is a social institution that is closest to an individual and is the first place for learning for someone. Examples received by consumers from their families are then internalized into themselves and become something that shapes consumer behavior in the future (Indah, 2014).

Moschis (in Kurniawati, 2018) states that families (especially parents) often influence a person's consumption patterns and attitudes. From parents also someone will get an orientation on religion, politics, and economics and personal ambitions. Even if the buyer no longer interacts deeply with his family, the family's influence on purchasing behavior remains significant (Kotler, 2000). The influence of parents can be even greater, in countries where parents remain with their children, even though the child is an adult, including in Indonesia. In addition, from several previous studies (Kurniawati, 2018; 2013); regarding reference groups with teenagers, it was found that parents always become idols for teenagers.

Seeing this phenomenon, previous researchs, its interesting to knowing how family (parents, siblings) influence the halal cosmetics's buying behaviour.

Adolescence choosen as a research participant because in psychology, adolescent is in transition time so it's make them in dubiety. So, they are dynamic, moody, always want something new,

and easy to influenced. Adolescence is in identity crisis, In the other hand, they want known as an individual but in the other hand they must identify themselves with peers, it makes them become loyal with their reference groups, in determining choice or decision making.

### **Family as a Reference Group**

Social sources such as the family often influence consumer-buying behaviour (Sharma, 2011). Bearden and Etzel (1982) maintain that the family influence on the individuals' consumption behaviour tends to be very strong, as family tends to help shape the individual's values, attitudes, and buying behaviour, through the process known as socialisation (Lamb, 2004). The socialisation process is defined as the manner parents pass cultural values and norms to children (Tucker, 2011).

When we go out to make a purchase, our decisions on which items to buy are usually influenced opinion leaders Opinion leaders are defined as a group of people where consumers look to get a stamp of approval before making a purchase (Foong & Yazdanifard, 2014).

Chandrasekar & Raj (2013) A family is a group of two or more persons related by blood marriage or adoption who reside together .The nuclear family is the immediate group of father, mother, and children living together. The extended family is the nuclear family, plus other relatives, such as grand parents, uncles and aunts, cousins, and parents-in law.

Individual members of families often serve different roles in decisions that ultimately draw on shared family resources. Some individuals are information gatherers, who seek out information about products of relevance. These individuals often have a great deal of power because they may selectively pass on information that favors their chosen alternatives. Some of them is decision maker(s). The *decision maker(s)* have the power to determine issues such: whether to buy; which product to buy; which brand to buy; where to buy it; and when to buy, etc.

Chandrasekar & Raj (2013) The Nature of Family Purchase. Initiators(s): The Family member who first recognises a need or starts the purchase process. Information gatherer(s): The individual who has expertise and interest in a particular purchase. Different individuals seek information at different times or on different aspects of the purchase. Influencer(s): The person who influences the alternatives evaluated, the criteria considered, and the final choice. Decision maker(s): The individual who makes the final decision. Purchaser(s): The family member who actually purchases the product. This is typically an adult or teenager. User(s): The user of the product .

### **Purchasing Behaviour**

The buying decision is to choose one of two or more alternative choices to buy (Shiffman, Kanuk, & Hansen, 2012). Sangadji & Sopiah (2013) states that purchasing decisions are the choice of an action from two or more alternative choices. Awantary (2014) states that purchasing decisions are a form of solving human problems in buying several or one product as a form of fulfilling and satisfying wants and needs.

Kotler & Armstrong (2016) explain that purchasing decisions are a stage in the decision making process of buyers where consumers actually buy. Setiadi (2015) defines purchasing decisions as an integration process that combines knowledge to evaluate two or more alternative behaviors and chooses one of them. Tjiptono (2008) states that based on consumer purchasing objectives can be classified as the purpose of purchase is to meet their own needs while consumer organizational goals for business needs.



Some of the factors that influence buying decisions include reference groups and perceptions of product quality (Fauziya & Lutfi, 2017). Previous studies of buying decisions state that decisions to buy products or brands are influenced by reference groups (Bearden & Michael, 2001)). Another study conducted by Childers and Rao (1992) and Makgosa and Mohube (2007) examined the same thing, namely the influence of peer reference groups on buying decisions. Studies Kurniawati (2005, 2013, 2018) also found that reference groups (celebrities, parents, peers, teachers, etc) influence buying decision for many kind of product.

### **Research Hypothesis is:**

H1: Parents significantly influence adolescent's halal cosmetic buying behavior

H2 : Siblings significantly influence adolescent's halal cosmetic buying behavior

### **METHODS**

This research is quantitative research. Subjects were 200 young women, 18-24 years, and use halal cosmetics. The sampling technique is purposive sampling. The questionnaire used was a questionnaire from Martin & Bush (2000), which was developed by researchers. Data analysis using simple regression

### **RESULTS**

The results of validity and reliability tests for parent influence variables, Cronbach alpha value of 0.897 with the validity value of all items above 0.2. This shows that the items in the parents's influence variables are valid and reliable.

The results of validity and reliability tests for sibling(s) influence variables, Cronbach alpha value of 0.854 with the validity value of all items above 0.2. This shows that the items in the celebrities's influence variables are valid and reliable.

Regression results for parent influence, it can be concluded that there is a significant effect of the parent's influence on the behavior of buying halal cosmetic products. This shown from the data that  $r = 0.396$  and  $\text{sig}(p) = 0.000$ ;  $p < 0.05$ . The value of  $R = 0.396$ ,  $R^2 = 0.157$  indicates that the artist's influence on the behavior of buying halal products is 15.7%.

Regression results for sibling's influence, it can be concluded that there is a significant effect of the sibling's influence on the behavior of buying halal cosmetic products. This shown from the data that  $r = 0.429$  and  $\text{sig}(p) = 0.000$ ;  $p < 0.05$ . The value of  $R = 0.429$ ,  $R^2 = 0.184$  indicates that the artist's influence on the behavior of buying halal products is 18.4%.

### **DISCUSSION**

Families (parents and siblings) have a significant influence on the behavior of purchasing halal cosmetic products in adolescents. This is also in line with Moschis (in Martin and Bush, 2000) regarding the influence of families on one's consumption patterns. Parents are the most idolized idol figures. Coupled with the survey results prove that 46.5% idolizing their parents.

Moschis (in Martin and Bush, 2000) stating that families (especially parents) often influence a person's consumption patterns and attitudes. Sharma (2011) also said that family often influence consumer-buying behaviour. From parents also someone will get an orientation on religion, politics, and economics and personal ambitions. Cultural factors also influence the role of parents. Bearden and Etzel (1982) maintain that the family influence on the individuals' consumption behaviour tends to be very strong, tends to help shape the individual's values, attitudes, and buying behaviour, through the process known as socialisation (Lamb, 2004). The

socialisation process is defined as the manner parents pass cultural values and norms to children (Tucker, 2011).

Neeley (2005), Parents engage in consumer behaviour instruction through both direct and indirect. Direct consumer learning is the intentional instruction by the parent for the purpose of teaching the child some aspect of consumer behavior. Indirect learning is the unintentional instruction of some aspect of consumer behaviour that is initiated by the child through direct observation or participation (McNeal 1987). However, most consumer instruction between parents and children does not take place directly. Parents place children in consumer situations, simply because the parent and child are together when the activity takes place, often referred to as co-shopping. The role of parents is getting bigger, in country like Indonesia. Culture in Indonesia, parents still live with their children, even though the child is an adult. This makes the influence of parents can be even greater.

Cotte & Wood (2004), Siblings can be important role models for each other and in many cases could act as a relevant peer group for comparison and modeling. Especially in adolescence, when peer comparisons are especially salient (Pechmann and Knight2002) siblings are likely to be a strong reference group. Thus, in some domains, the siblings in the home may socialize each other more than the parents do. In these instances, the influence can thus be thought of as intrageneration, and siblings become an important reference group influencing behavior (Bearden and Etzel 1982). Thus, some readers with children may note “my younger child copies everything the older one does,”.

Reference groups are known as social groups that are significant to an individual and against which the individual compares himself or herself. Like it or not, parent & siblings are perceived as important role models to adolescence today. It is extremely vital that marketing managers consider building awareness and gaining support of these important individuals, as they can do a great deal to help influence adolescence market today. Business organizations can make significant strides in reaching adolescence market in by partnering with these influential role models (parents and sibling). By looking at the significant influence of family on the behavior of buying halal cosmetic products, it is important for marketers to engage family in marketing communications (below the line or and above the line).

## CONCLUSIONS

Based on the regression test, it can be concluded that reference groups (parents & sibling) significantly influence the buying behavior of halal cosmetic products in 15.7% and 18.4%. So it is important for marketers to use a reference group for parents and siblings as a part of promoting halal cosmetic products.

## REFERENCES

- Bearden, W., & Michael, J. 1982. Reference Group Influence On Product And Brand purchase Decisions. *The Journal of Consumer Research*, 9.
- Chandrasekar, Ks & Raj, R, Vinay. (2013). Family and Consumer behaviour.
- Childers, T., & R Rao. (1992). The Influence of Familial and Peer-Based Reference Groups on Consumer Decisions. *Journal of Consumer Research*, Vol. 9.
- Endang, N.H.(2014). Perilaku Pembelian Produk Kosmetik Berlabel Halal Oleh Konsumen Indonesia. *Jurnal Ekonomi dan Pembangunan*, Vol 22, No. 1. *Jurnal LIPI*.

- Epp, A.M. and Price, L.L. (2008), "Family identity: a framework of identity interplay in consumption practices", *Journal of Consumer Research*, Vol. 35 No. 1, pp. 50-70.
- Escalas, J.E. and Bettman, J.R. (2005), "Self-construal, reference groups and brand meaning", *Journal of Consumer Research*, Vol. 32 No. 3, pp. 378-389.
- Fauziya, S., Lutfi, I. (2017). The Influence Of Reference Group And Perceived Quality Toward Purchase Decision Of Decorative Cosmetic For Lips Without The Halal Label. *Tazkiya Journal of Psychology Vol. 5 No. 1 April 2017*.
- Foong, L.S., Yazdanifard, R. (2014). Celebrity as A Marketing Tools. *Global Journal of Management and Business Research: E Marketing Volume 14 Issue 4 Version 1.0 Year 2014*.
- Handayani, M.S. (2016). Kala Kosmetik Halal Jadi Jawara Pasar. Artikel dalam [tirto.id](https://tirto.id/kala-kosmetik-halal-jadi-jawara-pasar-brvB). <https://tirto.id/kala-kosmetik-halal-jadi-jawara-pasar-brvB>.
- Heather Marie Schulz, (2015) "Reference group influence in consumer role rehearsal narratives", *Qualitative Market Research: An International Journal*, Vol. 18 Issue: 2, pp.210-229
- Hurlock, Elizabeth B. (2000), *Developmental Psychology*. 6<sup>th</sup> Edition. New York: McGraw – Hill.
- Jayawijaya, P. F., Arifin., Z., & Sunarti. (2017). Pengaruh Kelompok Acuan (References Group), Kebutuhan Mencari Variasi dan Harga Terhadap Perpindahan Merek (Brand Switching) Blackberry ke Android (Studi pada Mahasiswa. Fakultas Ilmu Administrasi Angkatan 2012 dan 2013 Universitas Brawijaya Malang).
- Cotte, J & Wood., S. L. (2004). Families and Innovative Consumer Behavior: A Triadic Analysis of Sibling and Parental Influence. *JOURNAL OF CONSUMER RESEARCH*, Inc. Vol 1. 3 1
- Kotler, Philip and Gary Armstrong. (2016). *Prinsip-prinsip Pemasaran*. Edisi 13. Jilid 1. Jakarta: Erlangga
- Kurniawati, M. (2005). Pengaruh Kelompok Acuan Terhadap Minat Beli dan Perilaku Pembelian Produk Food Supplement Pada Remaja. Universitas Trisakri. Tesis: Tidak diterbitkan.
- Kurniawati, M. (2013). Jenis Kelompok Acuan Yang Dapat Mempengaruhi Remaja Dalam Memilih Perguruan Tinggi (Program Sarjana). *Jurnal Phronesis*, 3(6): 65-76.
- Kurniawati, M. (2018). Pengaruh Kelompok Acuan Teman Terhadap Perilaku Membeli Produk Kosmetik Halal. Seminar Nasional Kewirausahaan dan Inovasi Bisnis VIII. Proceeding.
- Makgosa, R., Mohube. K. (2007). Peer influence on young adults' products purchase decisions *African journal of business management*. Vol. 1
- Martin, A. K. and Alan, J. Bush. (2000), "Do Role Models Influence Teenager's Purchase Intention dan Behavior?", *Journal of Consumer Marketing*, Vol. 17, pp. 441 – 445.
- McNeal, James U. (1987), *Children as consumers: insights and implications*, Lexington, MA: Lexington Books.
- Neeley, Sabrina. (2005). Influences on consumer socialisation. *Young Consumers: Insight and Ideas for Responsible Marketers*.
- Pew Research Center. (2010). Muslim population of Indonesia. Diunduh tanggal 3 desember 2016 dari <http://www.pewforum.org>.
- Ramanathan, S. and McGill, A.L. (2007), "Consuming with others: social influences on moment-to-moment and retrospective evaluations of an experience", *Journal of Consumer Research*, Vol. 34 No. 4, pp. 506-524.
- Russel, R. (2010). Why cosmetics work. Dalam R.B. Adams, N, Ambidi, K. Nakayama, & S. Shimojo, *The science of vision* (hal. 186). New York: Oxford University Press.

- Sangadji, E.M., dan Sopiah. 2013. *Prilaku Konsumen: Pendekatan Praktis Disertai: Himpunan Jurnal Penelitian*. Yogyakarta: Penerbit Andi.
- Schiffman, L. G., Kanuk, L. L., & Hansen, H. (2012). *Consumer Behavior a European Outlook* Second Edition. New Jersey: Pearson.
- Setiadi, N. (2015). *Perilaku Konsumen : Perspektif Kontemporer pada Motif, Tujuan, dan Keinginan Konsumen*, Kencana Prenada Media, Jakarta.
- Sharma, A. (2011). *Role Of Family In Consumers Socialization Of Children: Literature review* : Journal of Arts, Science & Commerce
- Tanner, R.J., Ferraro, R., Chartrand, T.L., Bettman, J.R. and Van Baaren, R. (2008), “Of chameleons and consumption: the impact of mimicry on choice and preferences”, *Journal of Consumer Research*, Vol. 34 No. 6, pp. 754-766
- Tjiptono, F. (2008). *Strategi Pemasaran*, Edisi 3, ANDI: Yogyakarta
- World Halal Forum, 2013. ([http://www.worldhalalforum.org/whf\\_intro.html](http://www.worldhalalforum.org/whf_intro.html) diakses Februari 2014).

# Improving Guiding Ability of Senior Students of PAUD Department to Anticipate the Possibility of Child Abuses Through Classical Guidance

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## Abstract

The purpose of the study was to improve the guiding ability for senior students of the Early Childhood Education (PAUD) Department in anticipating possible child abuses through classical guidance. The research method employed was action research. The actions taken followed the spiral model proposed by Kemmis and Taggart, consisting of four stages, namely: plan, action, observation, and reflection. The key instrument was the researcher, and the data were collected by interviewing teachers of PAUD and analyzing related documents. The stages in this research were: 1) preliminary study, 2) field observation and interview, 3) discussion with senior students of PAUD Department to find out their understanding toward guidance and counseling for pupils, 4) problem analysis, 5) making plans actions, 6) actions and observations and 7) reflections. This research was conducted in six activity sessions focused on knowledge and skill that as follow: 1) orientation toward the activities; 2) the basic concept of classical services; 3) classical guidance; and 4) classical guidance (continued); 5) Classical service practice in PAUD; 6) evaluation of field practice results. Data analysis was carried out by following the principles of qualitative research, with the following components: 1) student knowledge about child abuse, and 2) skills in guiding pupils to protect themselves from the possible child abuses that they might encounter. The results showed that students gained knowledge and skills in preparing pupils to anticipate the possible child abuses and to help overcome problems faced by their pupils. This knowledge and skills were understood by the research subjects which they found it different from what they got when they took guidance and counseling subject in their class. Such improvement could be observed from their ability to implement of classical guidance in PAUD.

**Keywords:** *PAUD, early childhood education, child abuse, classical guidance*

## INTRODUCTION

Child abuse has become a very worrying issue in Indonesia. Various issues related to child abuse have become the topic of discussion in various media, both printed and electronic media and social networking. The Minister of Social Affairs even gave a statement relating to the high rate of child abuse that occurs in Indonesia today. The same statement was also conveyed by the General Chairperson of the National Commission for Child Protection (KPAI), Arist Merdeka Sirait, who stated that the condition of child abuse was very dire and was in the emergency phase. As an illustration, the high number of cases of child abuse in Banten is ranked 9th. According to Arist, the crime rate reached 52.7%, as revealed to reporters in the

city of Serang on Tuesday, July 24, 2019. It can be said that the last three years have been years of concern for children in Indonesia.

Furthermore, KPAI data also shows hundreds of cases of sexual violence against children allegedly committed by the closest persons. KPAI commissioner, Jasra Putra, mentioned 218 cases of child sexual abuse in 2015, 120 cases in 2016, and 116 cases in 2017 (JawaPos.com, Wednesday, July 24, 2019). Based on the results of an interview conducted on Wednesday, 31 July 2019, with OP as one of the PAUD teachers in Tanah Datar District, also informed that the most frequent child abuses committed at school by children were physical and verbal abuses. It was happened because of the family and the environment condition. Tanah Datar Regency also faces the same problem which dominated by the sexual abuse case.

Dwi Ario Fajar, et al. (2014) reported that in the implementation of early sex education in PAUD, as an effort to anticipate and minimize the potential for sexual child abuse, was limited because the schools have technical guidelines, learning tools, or evaluations for early sex education. The various conditions above increasingly confirmed that the victims of the abuses were those who belonged to underaged children. To overcome these conditions, the role of teachers as parents of both children in school needed to be improved to be able to guide and equip children to protect themselves from these abuses. It can be done with socialization to prevent and detect child abuse as early as possible. One of them was through providing understanding and knowledge to teachers and kindergartens and PAUD (Mursyida as the head of P2TP2A Tanah Datar Regency). Senior students of

Early Childhood Islamic Education (PIAUDI) department is a prospective unit that can help schools in guiding children to protect themselves from any form. So far, students have only been provided with basic theories of guidance and counseling. As a result, guidance and counseling services for early childhood had not worked as expected.

The current research has a significant role in improving skills PIAUD students as prospective PAUD teachers in efforts to prevent child abuse in the future.

### **Nature of Child Abuse**

Child abuse is all forms of painful treatment, both physical and emotional. Violence is inappropriate behavior that results in physical, psychological, or financial loss or danger (Barker in Huraerah, 2006). Child abuse is all forms of physical or emotional and sexual abuse, ignorance, commercial exploitation, or other exploitation, resulting in injury, either real or potential harm to children's health, trust, or power (Fakih M., 2003 in Widiastuti and Sekartini 2005). Furthermore, Emmy (2007) from KPAI (<http://www.kpai.go>) divides child abuse into physical, sexual, and emotional abuse. In addition, Suharto (1997) groups child abuse into three categories. First is physical abuse, which refers to the torture, beating, and abuse of children, with or without the use of certain objects, which cause physical injury or death in children. The occurrence of physical violence against children is generally triggered by the behavior of children who are not liked by their parents, such as naughty or fussy children, crying all the time, asking for snacks, urinating, or throwing up in any place, breaking up valuables. The Second is psychological abuse, which includes rebuking, rude words, showing pornographic books, pictures, and films to children. The children tend to show symptoms of maladaptive behavior, such as withdrawing, shy, crying when approached, afraid to go out of the house, and afraid to meet other people. The third is sexual abuse, which can be in the form of sexual contact between a child and older persons (through words, touch, visual images, exhibitionism), as well as direct sexual contact between children and adults (incest, rape, sexual exploitation). The forth is social abuse, which can include ignorance and exploitation of children. Child

ignorance is the attitude and treatment of parents who do not give proper attention to the child's growth and development process. For example, children are isolated, alienated from their families, or not given proper education and health care. Child exploitation refers to discriminatory attitudes or ill-treatment of children by families or communities.

It can be understood that children who experience abuses will show changes in behavior, learning abilities, and habits. In addition, psychologically, they will always be suspicious, complain, and find it difficult to concentrate. Furthermore, the general characteristics of parents who commit child abuses are: 1) no attention to the child, 2) denying problems to the child both at home and school, and blaming the child for all the problems, 3) asking the teacher to give severe penalties and applying discipline to children, 4) regards children as stubborn, unworthy, and unruly children and 5) demands a level of physical and academic ability that is not affordable by children. ([repository.usu.ac.id/bitstream/123456789/33206/3Chapter%20II.pdf](https://repository.usu.ac.id/bitstream/123456789/33206/3Chapter%20II.pdf)).

In addition, parents who commit acts of abuse as described above will be seen from the behavior of those who always pressure the child, both physically and psychologically. The action is shown by the lack of attention to the child, often blaming the child and often regards the child as a stubborn child. Furthermore, parents who commit child abuse against children often ask other authorized people, such as teachers, to punish their children with severe penalties.

### **Factors Causing Child Abuse**

Child abuse can be influenced by three factors, including social, parents, and children. First, community or social factors include high crime rates, low social services, high poverty, high unemployment rates, customs regarding child parenting, the effect of cultural shifts, stress on caregivers, culture of giving corporal punishment to children, and the influence of the mass media. Second, parental factors or family situations that include the history of parents with physical or sexual abuse in childhood, teenage parents, emotional immaturity, low self-confidence, low social support, alienation from society, poverty, overcrowding (residential), problems interaction with the community, domestic violence, a history of depression and other mental health problems (anxiety, schizophrenia), have many children under five, history of drug abuses or alcohol, lack of social support for the family, there is a known history of child abuse in the family, lack of preparation to deal with stress at the birth of a child, denied pregnancy, single parents, history of suicide in parents/family, patterns of educating children, values of life adopted by parents, and lack of understanding of child development. Third, child factors include prematurity, low birth weight, disability, and children with problems/emotions. Other opinions are related to the factors that cause child abuse according to the National Commission for Child Protection namely: 1) domestic violence, this condition causes child abuse, children are often an easy target of parental anger, 2) family dysfunction, namely parents who do not work as they should, 3) economic factors, violence that arises due to economic crash, and 4) wrong views about a child in the family, parents assume a child is a person who does not know anything. Thus any parenting barking parents do. Violence obtained by a child from anyone will affect the child both physically and psychologically (KPAI, 2006).

It can be understood that parents who experienced abuse in the past from their parents will have a greater possibility to commit such abuses to other children. Furthermore, child abuse is also caused by the feeling of stress caused by various social conditions faced by perpetrators, such as unemployment, demands that exceed the needs of income, illness, and so on. As a result, child abuse will have an adverse effect. Finkelhor and Browne (in Tower, 2002) initiated four types of effects of trauma due to sexual violence, namely: a) betrayal. Trust is the main basis

for victims of child abuse, and they rely much on their parents. However, there will lose their trust to their parents soon as they found they their parents violated them, b) Traumatic sexualization. Russel (in Tower, 2002) found that women who experienced sexual abuse tended to reject sexual relations, and consequently became victims of sexual abuse in the household. It is a form of a traumatic experience by children who get abuses, c) powerlessness, or feeling helpless. This kind of trauma includes fear which haunts the victim's life. Nightmares, phobias, and anxiety experienced by victims are accompanied by pain. Feelings of helplessness result in individuals feeling weak and having excessive intensity and drive in themselves (Finkelhor and Browne, in Tower, 2002), d) stigmatization. Victims of sexual abuse feel guilty, ashamed, and have a poor self-image. Guilt and shame are formed as a result of helplessness and feel that they have no power to control themselves. Other victims use drugs and alcohol to punish their bodies, blunt their senses, or try to avoid the memory of the incident (Gelinas, Kinzl, and Bieblalam Tower, 2002).

To sum up, child victims of violence will experience a decrease in trust in the people around them. In addition, they will also experience anxiety, fear, shame, and feel different from the others. Dealing with this, Islam has clearly and firmly taught that parents are responsible for their children's protection from the fetus to adulthood. Furthermore, there are several anticipatory steps towards the emergence of child abuses, namely through: (a) socialization of the law, (b) providing religious understanding, (c) empowering human resources (parents), and (d) cooperation between the government and the community in protecting children.

### **Early Childhood**

Children are valuable assets for families and even a nation. Therefore, the period of growth and development in childhood, which is known as the golden age, needs to be considered. It is in line with the opinion of Hurlock (1980), which states that early childhood is a period known as an early childhood period and a golden period. This period is a very sensitive period and the development of all aspects of child development, which will later be the basis for further development. The ability of children to develop does not merely happen as it is; there are various processes and stages they go through. A variety of stimuli are needed from the surrounding environment to support their development, such as parents and teachers, and the surrounding community.

To help the child's development, family members, teachers, and the community should understand the nature of the child. Augusta (2012) defines early childhood is a child aged between 3-6 years". According to Cahyamaulidiah (2014) proposed that early childhood refers to children aged 0-6 years as stated in the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System in Article 1 paragraph 14 that early childhood education is education intended for children from birth until the age of 6 years. Early childhood is a unique individual who has patterns of growth and development in physical, cognitive, socioemotional, creativity, language, and communication aspects that are specific to the stage being passed by the child.

Based on some of the descriptions above, it can be concluded that early childhood is children aged less than 6 years. As individuals who are at a very rapid stage of growth and development both physically and mentally, they need to be stimulated through the family environment, PAUD non-formal channels, such as daycare centers (TPA) or playgroups (KB), and PAUD formal channels, such as kindergarten. PAUD teachers who are the personnel who are responsible for assisting the development of the children professionally.



## **Classical Guidance in PAUD**

Classical guidance is part of the guidance and counseling services in PAUD. Classical guidance service is a preventive service as an effort to prevent the occurrence of problems that are specifically directed at a proactive process. This classical guidance should be part of the learning process in PAUD. As stated by Suyadi (2009) that the existence of guidance and counseling in PAUD is very necessary, given the many problematic behaviors faced by children who need to get help to solve and prevent them. Suyadi (2009) also states that the main purpose of guidance and counseling at PAUD is to anticipate or take preventive measures for the emergence of problematic behavior. Thus, the guidance and counseling service is not only for children who have problems but also for children who have no problems to prevent possible problems. Syaodih (2011) suggests that one of the goals of guidance and counseling specifically for early childhood is to help them to be able to: a) get to know themselves, their abilities, their habits, and their pleasure; b) develop their potential, c) overcome the difficulties they face, d) prepare the mental and social development of children to enter the next educational institution.

In conclusion, guidance and counseling services performed for early childhood can help them in developing their potential or ability to anticipate so that they will not become the victims of child abuse: one of which is through classical guidance. Classical guidance is one of the counseling guidance services in which its implementation generally refers to the principles of guidance and counseling. Classical guidance activities carried out is a form of intensive service in fostering and helping children prevent the possibility of problems so that children can develop following what is expected. Syaodih and Agustin (2011) propose the steps that can be taken in classical guidance. First, problem identification in which the teachers need to understand why children behave in a particular way, so it is necessary to identify the problems encountered by children. Second, problem analysis in which teachers can analyze problems that children may encounter within a certain time. The teacher, therefore, needs to observe the behavior of the child, whether it is frequently or particularly take place. Third, diagnosis, which is conducted to find out various factors for the child's behavior and to decide approaches to the child and parents as well. Forth, prognosis in which the teacher figure out various alternative solutions to help solve the child's problem. Some alternatives that can be done by the teacher are as follows: 1) doing dialogue with children; 2) doing role-plays involving peers; 3) using story method; 4) collaborating with parents; 5) bringing the child to a more appropriate expert if several causes of problems that require special handling are found. Fifth, the implementation of teacher assistance through actions as a result of prognosis to solve student problems. Sixth is evaluation and follow-up. Evaluation and follow-up are conducted to see the success of service activities carried out to resolve student problems and plan follow-up when there are no meaningful changes in the child.

## **METHODS**

The method used in this study was action research. This method was used to increase understanding of the types of violence that occur in early childhood and increase the skills of senior students of PAUD department who will be responsible for tackling the occurrence of child abuse through guidance classical. The key instrument was the researcher. The participants were the senior (fourth year) students of the Early Childhood Education Department of IAIN Batusangkar. The data were collected through interviews with the students with the help of the interview guide and document analysis. The data obtained from the interview and document analysis were used to design materials for providing the students with knowledge and practice of classical guidance skills. The data obtained from students' practice on classical guidance

skills were used to develop a suitable formulation concerning the principles of guidance and counseling in PAUD and based on phenomena obtained in the initial survey and subsequently implemented to PAUD students. Classical guidance action research procedures carried out, namely: (1) preliminary study (2) field observation and interview (3) discussion with students (4) analysis of problems. Discussions between research participants and facilitators, as well as literature studies, were conducted to develop an action plan; (1) Making an Action Plan. The action plan was conducted to prepare the materials, tools, and techniques needed, a plan for recording data and its processing, as well as a plan for conducting counseling services. (2) The action plan that is carried out follows the spiral models put forward by Kemmis and Taggart, consisting of four stages, namely planning, action, observation, and reflection. (3) Data Processing and Analysis. Data analysis techniques used in this study were qualitative. (4) Reporting Results. The results of data analysis were reported comprehensively, containing a description of the implementation of actions following what had been planned along with its review. The comments given were based on the results of discussions with observers and are supported by relevant theories

## **FINDINGS**

This action research was conducted with 30 senior PAUD students. This study aimed to equip students with classical guidance skills for early childhood education pupils in dealing with violence that occurs against children. To achieve this goal, the researchers conducted 9 activities to practice counseling skills for students from 19 September to 24 October 2018.

1. Preliminary Study. The initial study of this research was conducted in finding information on the violence that occurs in children. Initially, dialogues with one of the PAUD teachers with the initial OP were conducted. OP explained that disputes often occur between fellow children who sometimes ended in a fight. In addressing this, the teacher advised the children to forgive each other and promised not to fight again. Dialogue with the senior students who had carried out field practice (PPL) regarding the data of violence that occurred at the PPL schools revealed a picture of violence in schools, such as some children were always alone in school, children who mocked each other and bullied among friends. These conditions were handled by calling the child and advising him.
2. Field Observations and Interviews. From the observations, it was found that children push each other, both boys and boys and girls. Interviews with Mrs. F were also revealed the data as follows: communication patterns that occur in children sometimes tend to be rude, this may be due to the children who attended school there came from harsh family environments, and their neighborhoods were close to the market environment. Interviews were also conducted to SS, a school principal of PAUD, about the types of violence that occurred in schools. She revealed that violence that occurred in children at school was only a fight that occurred between children while playing. Another information was also obtained that violence also took place in the pupil's home. It was found out when the child arrived at school, he immediately met his teacher and told her that he was often beaten at home because he did something wrong. The action taken by the school was to cheer up the child, and when the teacher visited and had the heart to heart talk with his parents, she found that that the child was in a problematic parent environment, and the child becomes the target of the anger of the parents.
3. Problem Analysis. From the preliminary studies, observations, and interviews, it was found that there were some forms of problems, both the obvious and not obvious ones. The teachers handled problems that appear by advising the child and had not yet been

able to explore in-depth the real condition of the child due to their limited abilities as PAUD teachers. Based on these conditions, researchers planned several activities to senior students of PAUD with skills, so that they were able to solve children's problems by first seeing the child's condition as a whole.

4. Action Plan. Researchers compile an action plan into 6 (six) sessions of coaching activities for students as research participants as they can be seen in the following table:

**Table. 1 Action Plan Services**

Sessions	Day/Date	Activity
1	Wednesday/September 19, 2018	The orientation of the types of violence that occur in children
2	Wednesday/September 26, 2018	Basic concepts of counseling services for early childhood education pupils
3	Friday/September 28, 2018	Classical guidance
4	Wednesday/October 3, 2018	Classical guidance
5	Friday/October 12, 2018	Practice counseling services in kindergarten / PAUD
6	Wednesday/October 24, 2018	Evaluation of field practice results

5. Implementation of Actions and Observations. Actions focusing on training and providing classical guidance skills to final year PAUD students as prospective teachers are conducted in 6 (six) activity sessions, which included:

*Session 1 (orientation of activities and material about the type of violence that occurs in children)*

- a) Plan. Based on the results of the preliminary study several activities in this first session were planned, including (1) conducting training activities orientation, (2) discussing several types of child abuse that occur in early childhood, (3) asking the participants' willingness to take part in 6 classical tutoring skills training activities. In this first session activity, four members as observers and facilitators in the implementation of this activity were involved and followed by 58 senior students of PAUD department.
- b) Actions. Some of the activities in the first session were: (1) conducting orientation which aimed at conveying the purpose of the activity, which was to equip participants as PAUD teacher candidates in responding to various child abuse that occurred in early childhood, both children who were victims and as perpetrators of violence as well, (2) discussing several types of child abuse that occur in early childhood. Some child abuses that participants encountered at school include a) a child who always avoided when asked to join together with friends. After being tried to be approached, it was found that the child's parents often got angry and yelled at him, b) a child who was always depressed when he arrived at school. After being approached, it was revealed out that the child felt sad because he could not save money like his other friends because he did not get money to save from his grandmother, and when he tried to ask him, she got angry with him. He was afraid to ask again, c) a child who was always depressed in school. It seems that when the child was approached, his mother often got angry with him every morning, d) children who pushed each other when arguing, and some even cried. e) a child who always upset his friend when his friend was praying. When he was approached and told that he never saw his parents praying and never being asked to pray. From several cases in schools where participants have practice teaching, most of the child gets physical abuse. The action needed to be followed up specifically, and

special activities that could be taken was through the act of counseling services, whether done directly on the child, or to parents as the closest persons to the child.

- c) Observations. The observation during the activity showed that the participants were very enthusiastic about the activity because they felt so much stressed and the violence that occurred among children who needed special skills. At this first meeting, the research team explained that to respond to the problem, skills training would be carried out.
- d) Reflection Based on observations made during the first activity, further activities to equip students with the concept of counseling were conducted. This was concluded from the statements raised by several students that they did not have special skills to solve problems that occurred in schools other than giving advice.

### *Session 2 (the concept of counseling in PAUD)*

- a) Plans. Based on observations and reflections made in the first session, several activities in this second session were planned, including: (1) gathering and discussing the willingness of the participants during the training and debriefing activities carried out; (2) discussing some classical guidance skills that had been possessed by participants. In this second session, four members as observers and facilitators were involved in the implementation of this activity, which was attended by 30 senior students of PAUD department.
- b) Actions. The activities carried out in this second session were: (1) gathering and discussing the willingness of the participants during the training and briefing activities carried out; (2) discussing classical guidance skills that must be possessed by participants as prospective PAUD teachers. Researchers, as well as resource persons, explained the basic concepts of implementing classical guidance in PAUD. The points explained were on classical services; teachers could provide information to students using interesting media. At this activity, classical guidance for early childhood is very different from the implementation of classical learning in general. Before the activity ended, the participants were assigned to prepare material that could be used for classical guidance exercises.
- c) Observation. From the observation, the participants remained very enthusiastic about the material being discussed. They said that they really needed that particular skill. They also said that when they attended BK Education course in PAUD, they only got the concept of classical guidance in PAUD theoretically and did not know how to implement the skills.
- d) Reflection. Discussion among researcher and the observers, they believed that further activities needed to be carried out. One of which was the need to provide the understanding and specific training in several activity sessions, so that they have such counseling skills.

### *Session 3 (classical guidance)*

- a) Plan. Based on the results of observations and reflections conducted at the second session, several activities were planned as follow: 1) explaining and demonstrating the implementation of technical guidance, 2) giving an opportunity to the participants to try to train themselves in the implementation of classical guidance, 3) together with other participants, observing and responding to the participants' views. In this session, four members as observers and facilitators in the implementation of this activity were

involved. This activity was carried out on Friday 28 September 2018, 9 am to 1 pm, which was attended by 30 senior students of PAUD department.

- b) Actions. Activities carried out in this session were: 1) explaining and exemplifying the implementation of classical guidance, 2) giving an opportunity to participants to try themselves in the implementation of classical guidance, 3) together with other participants observing and responding to the participant's skills.
- c) Observations. Observer observed that in this session, enthusiastic students participated in this activity. During the training session, participants were still stiff and lacked confidence, not ready, not brave enough, did not have ready-to-use material, hesitant to appear, and had not prepared the material using PowerPoint. Discussing with the participants, they said that the material was discussed in classical guidance out of the material that they usually did. For example, guidance for sex education at an early age, they still got confused using language that was easily understood by children.
- d) Reflection. Based on the observations and results of the exercise, the need for the next session for classical guidance training was very needed because of the skills to be practiced. It was necessary to strengthen the training so that they possessed a better ability to conduct classical guidance following the character of early childhood. Researchers also assign participants to prepare further material.

#### *Session 4 (advanced classical guidance)*

- a) Plan. Based on the results of discussions and reflections on the session activities, several activities were planned. 1) Participants tried to train themselves in the implementation of classical guidance 2) Researchers and other participants found and discussed the performance of participants, observers, and facilitators in carrying out this activity. This activity was carried out on Wednesday, October 3, 2018, at 9 am to 1 pm. which was attended by 30 senior students of PAUD department.
- b) Actions. Activities carried out in this session were: first, participants conducted classical guidance with the material they had prepared, such as the material with the title "me and my body, and body parts that can be touched and cannot be touched" (aku dan bagian tubuhku, dan bagian tubuh yang boleh disentuh dan tidak boleh disentuh). This material was given so that students can know which parts of their body were allowed and must not be touched, which parts of body parts that must not be touched by other people, and what they have to do. Secondly, participants did classical assistance with the material "me and my family". This material was given to PAUD children who were invited by their religion who helped him and his family and how to connect with family, to provide an understanding of the need for mutual support and support in a family.
- c) Observations. Observation toward the participants shown that there were very enthusiastic in participating in the training activities. Participants started to be more flexible in conducting classical tutoring activities, using material and videos that they had prepared.
- d) Reflection. Based on these observations, it was believed that it was sufficient for classical guidance training. Participants had started to be skilled in carrying out these classical guidance activities.

### *Session 5 (the activity of counseling practice)*

Practical activities to the school carried out for seven sessions were believed to be maximal in adding insight and skills to the senior students of PAUD as prospective teachers in PAUD. This practice activity was carried out for one week, from the 15 to the 20 of October 2018. The schools that were decided for this practical activity were: (1) TK. Al-Faizin Pincuran Tujuh (2) TK Islam Mesjid Raya Lantai Batu (3) PAUD Anakku Batusangkar (4) PAUD-QU Tahfidzh Mutiara Qur'an (5) TK Lenggogeni Sungai Tarab (6) PAUD Terpadu Al-Hikmah, Kotobaru

During the fieldwork, participants were expected to conduct classical guidance. The participant conducting the activity examines assigning participants to take videos of the implementation of the practice. During the fieldwork carried out, the researcher and the team also conduct field supervision. From the supervision conducted, there were several things obtained from the school, including: (1) the school welcomed students who practice, (2) by observing the activities carried out by the senior students, the school also expected that there was no training in classical guidance skills. They had to respond to various conditions that were experienced every day in schools, (3) the school also expected that students could practice better in school later.

### *Session 6 (Evaluation of Field Practice Results)*

Evaluation of the results of field practices that had been carried out by students found several things, including:

- 1) Students felt that there was something new for them when handling children by using counseling skills. Previously, when they were attending school, they resolved children's problems by advising. However, with the existence of these counseling skills, they obtained more complete data from children, although it required greater patience in exploring the child's condition
- 2) In the implementation of classical guidance, students got their satisfaction because the children were very enthusiastic about participating in activities that were equipped with videos that were easily understood by early childhood
- 3) Group counseling activities they cannot do maximally because of the limited time they had.

## **DISCUSSION**

The results of this study illustrated that the classical tutoring skills given to PAUD students in their final years as prospective teachers were very helpful for them in dealing with students. Students, as participants, felt the difference in dealing with students by using skills rather than without classical guidance skills. Children talked more about their condition and understood themselves than if only advised. This is in line with the function of counseling guidance for early childhood which is explained by Rifda el Fiah (2015: 14-16), that counseling guidance for older children functions as follows: 1) The function of understanding refers to guidance and counseling produces an understanding of several things: understanding of students themselves, especially by parents and teachers; understanding of the environment of students which includes the family and school environment; understanding of the wider environment (outside the home and school); understanding of ways of adjustment and self-development; 2) Prevention function, which is guidance and counseling that helps students to be prevented from

various problems that can interfere with, hinder or cause difficulties in their development processes; 3) Repair function, namely counseling services conducted by the teacher will help solve various problems experienced by students; 4) Maintenance and development functions, guidance and counseling efforts that help maintain and develop a variety of potential and positive conditions of students in order to develop themselves well and sustainably.

The function of guidance and counseling services, in general, is also a function of classical guidance specifically conducted at an early age to be able to help students understand themselves, to prevent them from problems, including the problems of violence that often occur today, alleviating problems that are being experienced and maintained and the potential it has developed through classical format.

1. Understanding function states that guidance and counseling will produce understandings of several things: understanding of students themselves, especially by parents and teachers; understanding of the environment of students which includes the family and school environment; understanding of the wider environment (outside the home and school); understanding of ways of adjustment and self-development;
2. Prevention functions where guidance and counseling that helps students to be prevented from various problems that can interfere with, hinder or cause difficulties in their development processes;
3. Repair function states that counseling services conducted by the teacher will help solve various problems experienced by students
4. Maintenance and development functions state that guidance and counseling efforts help maintain and develop a variety of potential and positive conditions of students to develop themselves well and sustainably.
5. The function of guidance and counseling services, in general, is also a function of classical guidance conducted explicitly at an early age to be able to help students understand themselves, to prevent them from problems including the problems of violence that often occur today, alleviating problems that are being experienced and maintained and the development of its potential through classical guidance skill format. Concerning the phenomenon of violence that has occurred lately, it can be understood that when students already understand the forms of violence that exist and know how to protect themselves from these acts of violence, it will eventually be prevented from violence. From the results of research conducted obtained that the need for classical guidance skills is needed because these skills are different from guiding skills in general.
6. To realize these functions, PAUD teachers should master classical guidance skills. It is in line with the results of KPAI studies in 9 provinces in Indonesia in 2012. The causes of violence against children were: parents did not have the concept of care, lack of physical and psychological affection at home, children do not find an identity at home so seek recognition outside the home, want to be recognized as a member of the group, free time that was not utilized properly, the community indifferent and less sensitive to community vigilance.

Based on the results of the study above, the skills possessed by teachers were expected to minimize the existing causes. For example: by giving educative stories classically by discussing the causes of the effects and how to handle them in class. Therefore, students can protect and can alleviate the problems that occur. In addition, teachers should also have the skills to: 1) observe the general appearance of students, moods or affections that can provide

information about the emotional condition of children, 2) active listening in which the teacher's ability to actively listen to conditions that occur in children, effective listening, the skills that must be owned by the teacher are: responding to at least the students' stories and questions, summarize the points conveyed by the child, so that the teacher knows the conditions, 3) help the child tell the story and touch deep emotions by using questions that are easy to understand and encourages the child to tell more, 4) handle rejection and transfer that are raised by the child, 5) deal with self-concepts and self-destructive beliefs, and 6) actively facilitate changes that occur in children.

From the explanation above, it is understood that this ability is applied in classical guidance activities appropriately. Moreover, the teacher must also have skills in choosing and using media that is suitable and following the character of the child. Geldard & Geldard (2012: 207-322) describes some that can be used in counseling children, as follows: 1) play therapy room; services for children are easier and more effective if done in a specially arranged room, 2) using miniature animals which are very useful for establishing relationships with children and finding out about children's perceptions of their families, 3) sand tray game, this is useful to help children tell the story; 4) playing with clay, clay is very useful for helping people to contact and release emotions, 5) drawing, painting, sticking and construction; the use of this media can invite children to create images or symbolic representations of problems, feelings, and themes related to the story. From the explanation above, it can be understood that teachers can use many media in exploring children's problems in solving early childhood problems.

## CONCLUSIONS

Based on the results of the study, it can be concluded that counseling skills with classical guidance skills provided to PAUD teachers provide something positive. Initially, in handling students' problems using only advice without exploring further problems. After debriefing, they have the skills to solve the problems of students by first exploring the condition of the child through skills that had been trained. In the implementation of the training, the participants were enthusiastic and willing to practice well. Participants practiced in several PAUDs to practice the skills they had acquired through training. To see the reaction of the school about counseling practices, the researcher conducted field monitoring to schools of practice. The results of the monitoring conducted found that the school was very welcome, and the school also needed counseling skills to be provided to the PAUD teachers in the field.

Based on the results of the above research, it suggests to the persons or institutions concerned to improve the ability to guide prospective PAUD teachers to the possibility of child abuse through guidance and counseling. Therefore, it is suggested to 1) the Department of PIAUD FTIK IAIN Batusangkar to review the number of credits for counseling guidance courses in PAUD, and 2) the Department of PIAUD FTIK IAIN Batusangkar to review the demands of field practice that not only the ability to teach but also the ability to do special technical guidance and counseling guidance skills in general.

## REFERENCES

- Augusta. (2012). *Pengertian Anak Usia Dini*. Di unduh pada 1 juni 2016 dari <http://infoini.com/pengertian-anak-usia-din>
- Cahyamaulidiyah, Eka. (2014). *Anak Usia Dini 6*. Di unduh 8 September 2016 dari [http://ekacahyamaulidiyah.blogspot.co.id/2014/02/anakusiadini\\_6.html](http://ekacahyamaulidiyah.blogspot.co.id/2014/02/anakusiadini_6.html)



- Fajar, Dwi Ario dkk. 2014. *Strategi optimalisasi peran pendidikan seks usia dini di paud Dalam menanggulangi pelecehan seks Terhadap anak di Pekalongan*.
- Geldard, K. dan Geldard, D. 2012. *Konseling Anak-anak: Sebuah Pengantar Praktis*. Jakarta: Indeks
- Hurlock, E.B. 1980. *Psikologi Perkembangan Suatu Pendekatan Sepanjang Rentang Kehidupan*. Alih Bahasa: Istiwidayanti dan Soedjarwo. Jakarta: Erlangga
- Huraerah, A. 2006. *Kekerasan Terhadap Anak*. Nuansa. Bandu Widiastuti, Daisy dan Sekartini, Rini. 2005. Deteksi Dini Faktor Penyebab dan Dampak Perlakuan Salah pada Anak. *Jurnal Sari Pediatri* , Vol 7 No 2 September 2005
- Rifda, El Fiah. 2017, Urgensi Bimbingan dan Konseling di Taman Kanak-Kanak, Prodi Bimbingan dan Konseling Fakultas Tarbiyah dan Keguruan IAIN Raden Intan Lampung.
- Setyawan, Dafit. <http://www.kpai.go.id/berita/tahun-2017-kpai-temukan-116-kasus-kekerasan-seksual-terhadap-anak/> (25 Juli 2019)
- Soekresno, Emmy. (2007). *Mengenali Dan Mencegah Terjadinya Tindak Kekerasan Terhadap Anak*. Sumber : Komisi Perlindungan Anak Indonesia, <http://www.kpai.go>. Didwonload Mei 2019
- Suyadi. 2009. *Permainan Edukatif yang Mencerdaskan*. Yogyakarta: Powerbook
- Syaodih, Ernawulan. 2011. *Bimbingan di Taman Kanak-kanak*. Jakarta: Departemen Pendidikan Nasional. Direktorat Jenderal Pendidikan Tinggi.
- Tower, C. 2002. *Memahami Pelecehan Anak dan Penelantaran (bagi ab 5)*. Boston: Allyn & Bacon. A Perdeson Education Company

# Meta-Behavioral Skills and Decision-Making Skills among Undeliquent Students

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## Abstract

Meta-behavioral skill is defined as thinking process that involved before individu takes an action. This study aims to explore the use of meta-behavioral skills among undeliquent students (UDST) when they are making any decision. A total of four students were selected as participants in this study. The participants were interviewed using semi-structured interview developed by the researcher. The interview data was thematically analyzed using Nvivo version 8.0 software. The findings show these students (UDST) used meta-behavioral skills and meta-behavioral strategies when they are making decision. However, the use of this meta-behavioural skills is still unbalanced. Therefore, it is proposed that these meta-behavioral skills should be taught to this undeliquent category students (UDST) so that they will become more 'metacognitive' (their thinking about thinking process will increase) in taking any actions.

**Keywords:** *Metacognition, meta-behavioral skills, decision-making skills, undeliquent students (UDST).*

## INTRODUCTION

Metacognition skill is not a new skill but its use has been discovered more than 100 years ago through philosophers, psychology and education ideas (Saemah, 2004). This term is increasingly popular when it was introduced by Flavell in 1976 (Saemah, 2004; Pena-Ayala & Cardenas, 2015). Based on Saemah (2004), it can be said that this skill has an adjacent relationship in individual (the individual in the context of this study is the undeliquent category student) since they are in childhood and begin to grow when they are growing up (Flavell, 1985; Wellman, 1985). This means that this skill is very important as a locus of internal self-control (Fatimah & Azaman, 2006; Saemah & Zakri, 2013; Zakri & Saemah, 2015; Zakri & Saemah, 2018) moreover in the context of meeting the demands and challenges of the 21st century education (Downing, Ho, Shin, Vrijmoed & Wong, 2007).

The wave of Industrial Revolution 4.0 has blurred the physical, digital and biological worlds especially in educational setting (Anealka, 2018). The Industrial Revolution 4.0 has clearly formed the landscape of current educational challenges that require educators to develop strategic planning (Aryani & Norhayati, 2018) that enable students to successfully overcome these challenges. In this context, students with metacognitive skills are expected to be more prepared to face current and future learning (Trilling & Fadel, 2009) as this skill enable them to deal with any situation and challenge in life (Flavell, 1985; Wellman, 1985; Saemah, 2004; Zainah, 2006, Downing et al. 2007, Majid et al. 2015; Prem & Amit, 2015; Ben-Eliyahu, 2019).

According to Pena-Ayala and Cardenas (2018), metacognitive skills are mental process that occurs in the human brain that is essential for humans to function in many ways including helping individuals to solve problems that come across and it is useful in self-control behaviors

(Flavell, 1979). Based on previous studies on this concept, it is found that metacognitive skills have a positive relationship with individual learning outcomes (Callan et al. 2016). Such positive links can be identified through their relationship with other variables such as motivation and achievement (Saemah & Phillips, 2006), social and cultural factors (Downing et al. 2007), decision making (Bartha & Carroll, 2007), learning of mathematical subjects (Roslina et al. 2010; Prem & Amit, 2015) and student motivation, learning habits and impact on learning (Mazumder, 2012; Schwonke et al. 2013; Susser & McCabe, 2013).

The concept of metacognitive skills (i.e. cognition about cognition – Flavell, 1985; Wellman, 1985; Shabnum, 2015) has been synthesized by behavioral concepts (Ajzen's theory of behavioral theory, Freud's psychoanalytic theory, Piaget's moral development theory, Kohlberg's moral development theory and Eisenberg's prosocial reasoning model). The combination of these two concepts is the result of the understanding and analysis that a behavior needs to be planned, monitored and evaluated first at the executive level, at the metacognitive level before it is revealed in a form of observable and evaluated behavior. As a result of the combination, a new term has been called as the meta-behavioral skills (Saemah & Zakri, 2013; Zakri & Saemah, 2018). In the context of this research paper, meta-behaviors are defined as the thinking processes that involved in creating undeliquent students' before they are taking action or making a decision (Zakri & Saemah, 2015).

Abdul Salam et al. (2010) stated that only a group of smart students can make decisions in solving every problem they face. Smart students are able to make good decision in choosing and demonstrating positive actions although they are facing all sorts of problems in their daily life. In this research, undeliquent students are considered as smart students too. They are generally not involved in any disciplinary problems at schools and they are also achieved the meta behaviours level first before they demonstrate it in their actions or behaviour (Bartha & Carroll, 2007). However, the findings of Zakri and Saemah (2013) found that students of undeliquent category were also involved in making feeble decisions by involving in disciplinary problem in school at a controlled level. Indeed, according to Wilson (2011) these meta-behavioral skills can be taught to make an individual more 'metacognitive'. As they become more 'metacognitive', they are expected to be able to solve any problem they face because humans are considered to be information-processing systems and able to adapt to their complex environmental demands (Simon & Barenfeld, 1969; Muhamed, 1990).

Therefore, this study aimed to explore the use of meta-behavioral skills among undeliquent students as they are making decisions. This study is essential as the literature has showed that the undeliquent students also involved in disciplinary problems although generally they are considered as smart students too. Simultaneously, the Industrial Revolution 4.0 which occur in the 21st Century might cause more difficulty and challenging for these students to make good decision before taking any actions. This is caused by the struggle in making differences amongst physical, biological and digital world. These difficulties inspire the researcher to explore further details apart from trying to discover certain evidences in order to help this indeliquent students to function better in this century.

## **METHODS**

### *Sample of the study*

The study sample consisted of four participants who were the undeliquent students. The undeliquent category students is a group of high school students who are not convicted of any of the 11 types of misconduct behaviour that are stated in the Student Disciplinary Control System (e-Discipline) handbook. The sample of this study was selected using purposive

sampling design which focused on the selection of samples based on the specific features required for in-depth interview process. For example, students of the first undeliquenst category were selected based on the following three characteristics, (i) high meta-behavior skills score, (ii) decision-making skills score not exceeding meta-behavioral skills score, and (iii) not performing any disciplinary behavior.

#### *Research instruments and data analysis*

This study used an interview protocol instrument consisting of four main sections: headings, ice-breaking questions, central question sections and closing sections. Data was analyzed using qualitative approach. It was transcribed and thematically analyzed using Nvivo version 8.0 software and steps suggested by Taylor-Powell and Renner (2003).

## **RESULTS**

The findings of this study are reported based on two sub-topics: (a) meta-knowledge of behaviors used in undeliquent students' decision making, and (b) meta-behavioral strategies used in undeliquent students' decision making

### **a. Meta-knowledge behaviors used in undeliquent students' decision making**

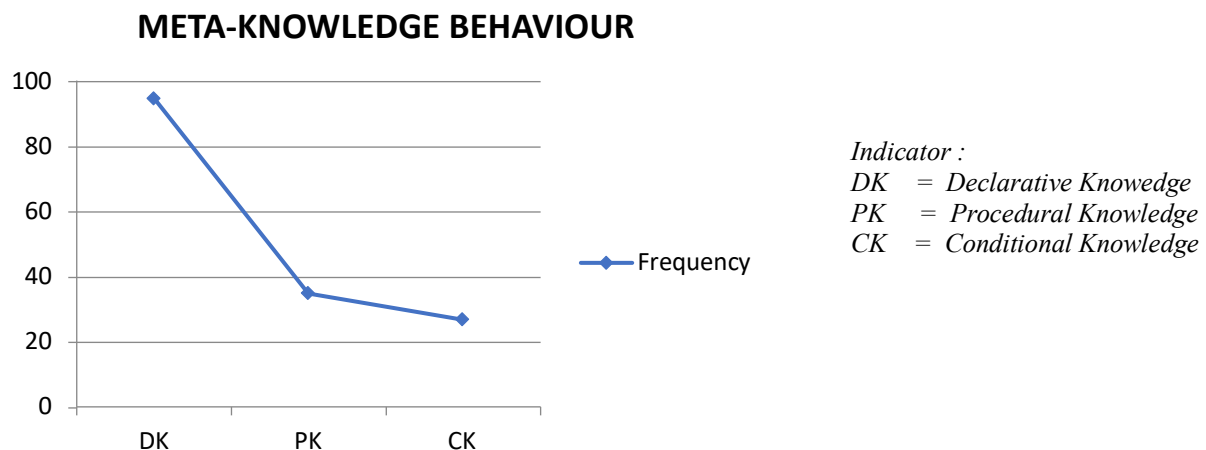
Table 1 shows the frequency of textual emergence of the meta-knowledge skills of behaviour among undeliquent students (UDST) participants. Based on the Table 1, it was found that the Declarative Knowledge (DK) subtheme was found to be the most dominant in the transcript of the interview. The transcript showed 95 times of DK and followed by 35 times the Procedural Knowledge (PK) subtheme and 27 times of the Conditional Knowledge (CK) subtheme appears in the transcript. This frequency indicates that participants in the undeliquent category used more Declarative Knowledge (DK) subthemes when making decisions than Procedural Knowledge (PK) subtheme.

**Table 1. Frequency Appearance of Subtheme Text for Meta-Knowledge Behavior UDST Students**

Subtheme	UDST1		UDST2		UDSTR1		UDSTR2		Total
	F	%	F	%	F	%	F	%	
Declarative Knowledge (DK)	23	24.2	21	21.1	18	18.9	33	34.7	95
Procedural Knowledge (PK)	13	37.1	7	20.0	5	14.3	10	28.6	35
Conditional Knowledge (CK)	8	29.6	7	25.9	6	22.2	6	22.2	27

*Indicator :*

*F = Frequency*



**Figure. 1. The total frequency subthemes of meta-knowledge behavior for UDST participants**

Based on the bar graph in Figure 1, it is showed that conditional knowledge (CK) is the least used subtheme by UDST participants when making decision. On the other hand, declarative knowledge (DK) is seen as the most frequently used subtheme. The following are examples of subthemes of the meta-knowledge behaviors used in UDST students involved in decision-making:

### *Declarative Knowledge (DK)*

The UDSTR1 was found to use declarative knowledge in the transcript text (ST 5.1 (18): L346 - L358) to evaluate his own decision making. Based on the text (ST 5.1 (18): L346 - L358), he was found to be weak in Physics. However, he knew which teacher that could help him best to score in the subject. The characteristics of his selected teacher are to be an active teacher, teacher who likes to replace unsupervised classes, a modest teacher, give lots of practice and speak well. The UDSTR1 statement is based on the following text:

UDSTR1

Aaa..as...aaa..aaa..I didn't forget that when...when I learnt in Form 4...aaa...my father asked...aaa...aaa..what..where..where...aaa..with whom you want to learn the difficult subject. So, I told...aaa..the difficult subjects I want to learn is Physics. So, he proposed that there are two ..two proposals..that are.. two kind of teachers, so ...aaa... while I chose...aaa...aaa...the first prosposal by my father. Aaa...as time goes by, the teacher...aaa..will not replace the class...aaa..the missing class. And the teacher...aaa... I think he is more arrogant and will not talk politely. Aaa...after that...aaa... after I...hmm... discuss with my father, I decided that my father's second suggestion is the best because...aaa...the second teacher is better and more active than the first teacher whom I learned Physics with because he replaced all the missing classes and he even gave more exercises which helped me to score in my Physics subject.

(ST 5.1 (18) : L346 – L358)

### *Procedural Knowledge (PK)*

The UDSTR1 student was found to use procedural knowledge in transcript text (ST 2.5 (5): L131 - L138) to define problems and generate alternatives. He knows an effective way to review his lessons. The UDSTR1 statement is as follows:

UDSTR1

Hmm..aaa...as example...aaa..while...aaa..ok...aaa..I was in Form 3, I had...aaa..while I was in Form 3,...aaa..when I was having mid-year examination, aaa...I already identify that aaa...one week before,,one week before the exam started...aaa...that time I just started revision. So, aaa...I already know that is the wrong method to learn. So...aaa...we have to study earlier and we have to make revision very fast and...aaa...effective. So...aaa..that method that help me to score in my PMR. So, I used that method to study for my PMR.

(ST 2.5 (5) : L131 – L138)

### *Conditional Knowledge (CK)*

In the transcript text (ST 1.2 (14): L120 - L128) it was found that the UDST2 student used conditional knowledge during the process of defining problems in decision making skills. UDST2 recognized that playing truant in the classroom is an unacceptable behavior because it can lead to undesirable risks to her. The transcript of the UDST2 statement is as follows:

**Researcher**

So, why didn't you do the mistake?

**UDST2**

Because.....

**Researcher**

You didn't play truant?

**UDST2**

First, I don't like it. After that, I'm afraid that teacher will cane me. After that canning, teacher will call my father, my father will get angry and he will beat me...

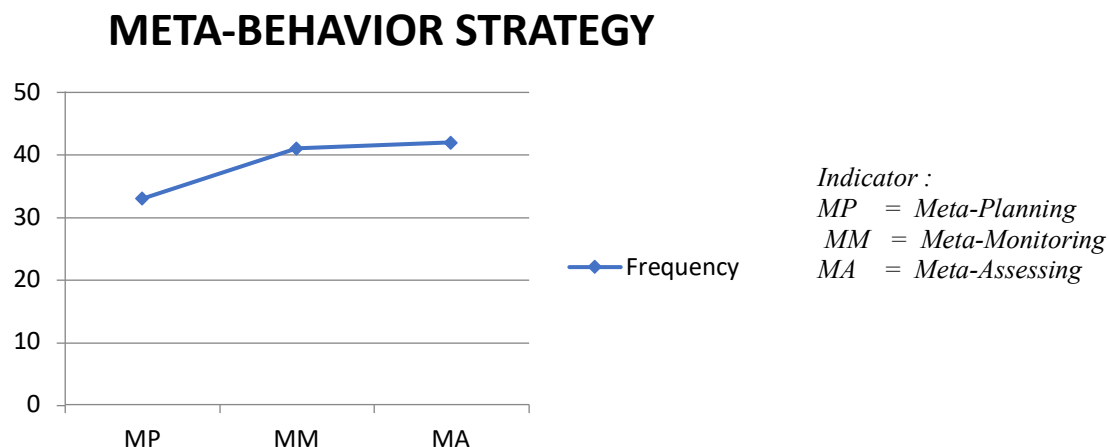
(ST 1.2 (14) : L120 – L128)

b. Meta-behavior strategy used by the UDST students when making decisions

Subsequently, the description in this subheading is also initiated by conducting a subtheme analysis of the meta-behavioral strategies used in decision making in general. The general frequency and percentage analysis of the subthemes is as shown in Table 2 and Figure 2. In Table 2, the textual emergence of the meta-behavioral strategies detected from the transcript of the interview text of the UDST participants is shown. The Meta-Monitoring (MM) subtheme and the Meta-Assessing (MA) subtheme were found to appear almost identical in the transcript text, respectively, appearing 41 times and 42 times, while the Meta-Planning (MP) subtheme appeared 33 times in the transcript text. Frequency analysis showed that participants in the UDST category were found to be more likely to use MA subthemes and MM subthemes compared to MP subthemes when making decisions.

**Table 2. Frequency appearance of subthemes text for Meta-Behaviour UDST students**

Subtheme	UDST1		UDST2		UDSTR1		UDSTR2		Total
	F	%	F	%	F	%	F	%	
Meta-Planning (MP)	8	24.2	4	12.1	10	30.3	11	33.3	33
Meta-Monitoring (MM)	13	31,7	8	19.5	6	14.6	14	34.1	41
Meta-Assessing (MA)	11	26,2	7	16.7	11	26.2	13	31.0	42



**Figure. 2. The total frequency subthemes of the meta-behavior strategies for UDST participants**

The bar graph in Figure 2 shows that UDST participants were less likely to use meta-planning (MP) subthemes when making decisions than other subthemes. The following are examples of subthemes of the meta-behavior strategies used among the UDST students' decision-making process: -

#### *Meta-Planning (MP)*

Participants of the UDSTR2 study was found to use meta-planning (MP) in the transcript text (ST 1.7 (14): L539 - L552) to define problems in the decision-making process. UDSTR2 planned to change himself despite knowing the risks he will face as he does not want to miss out on lessons anymore. The text of the UDSTR2 text is as follows:

#### **Researcher**

Why did you change your decision?

#### **UDSTR2**

Because I feel if I made that decision..the wrong one..I will have to take the risk right. Aaa...like not going to school..Now..now..right now..I've changed. Now everyday I go to school, everyday..aaa...because I don't want to take the same risk. I have to face it if I did make the wrong decision before this. Aaa..if I go to school, if the teacher scold me still I have to go since that the right thing., better go to school so that I won't miss my lesson...aaa.

(ST 1.7 (14) : L539 – L552)

#### *Meta-Monitoring (MM)*

The UDST1 student used meta-monitoring (MM) in transcript texts (ST 3.1 (15): L368 - L374) to make decisions under the subthemes of reviewing risks and consequences. He was found to be reviewing and evaluating behaviors that could help him to become the family's pride. He evaluated of the advantages of following the footsteps of his older brother and sister. The UDST1 transcript texts are as follows:

#### **UDST1**

Benefit...hmm...aaa..I've thought about. Aaa...like...aaa...once...aaa..I was small-small..well..normally..aaa..I always want to play. Aaa..always want to play..disturbing friends. But when I look at ..aaa..sisters..brother go to school. They all succeed. Aaa..think...aaa..I think if I follow their ways, I could get the same benefit, I could become clever like them. I can become successful too. I also want to feel...aaa..I ..being proud by my parents. I don't want..aaa..being useless..keep on being blamed always...aaa...

(ST 3.1 (5) : L368 – L374)

#### *Meta-Assessing (MA)*

Meta-assessing (MA) was used to select alternatives by UDST1 student as in the transcript text (ST 4.1 (2): L528 - L539). UDST1 analyzed and assessed the importance of taking English classes so that she can understand the format of the questions for the exam. Examples of UDST1 text are as follows:

#### **UDST1**

Example...aaa..example...aaa..wanna go..like I'm in the middle. In the middle suddenly I feel like...aaa..I'm in the middle of a junctionlah...like the road to the school, this road goes to the mall. After that, my friends insisted strongly that going to the mall, been a while all of us didn't go together. Then, at school ..there is class. Aaa..in my heart the intention is going to school...like..going to mall too..aaa..let's go too. Still wanna go. After that, when my friends said we better not going to mall...better we go to school. Aaa..during weekend...or free time..we go to the mall. Aaaa..after that, like just now, Cikgu Roslinda called me to go upstairs for this interview. At the same time I also have English class. The English class is until 9am, teacher told us to gather at 8.30am right. After that, aaa... I told myself that..aaa.. I wanna learn English because she teaches us how to answer the exam questions. Then, it's okay and keep on learn this...Aaa..later I'll tell teacher the reason that I couldn't attend her class...aaa..because I want this...because..I want exam..I want to learn how the examination form.

(ST 4.1 (2) : L528 – L539)

## DISCUSSION

Based on the results of this study, it was found that the meta-behavioral skills, namely the meta-knowledge skills and the meta-behavioral strategies, developed (Flavell 1985; Wellman 1985) and were wisely used by the undelinquent students when making their decisions.. For example, the declarative knowledge (subcomponents of the meta-knowledge skills skills) of the UDSTR1 study participants (ST 5.1 (18): L346 - L358) allowed him to evaluate the decisions he would make based on his knowledge of personal weaknesses and the best characteristics of teachers that could help himself to become successful in Physics. The findings showed that the UDSTR1 able to judge his decision wisely based on his declarative knowledge. Similarly, the UDSTR2 (ST 1.7 (14): L539 - L552) student (ST 1.7 (14): L539 - L552) who had defined his problems and planned to change them. He is aware of the risks he would face. The results also indicated that the UDSTR2 was able to make decision to change himself although he understood the risk that he might be facing which indicated that this is the result of applying his good meta-planning skill. This indicates that these meta-behavioral skills are very important for students in the UDST category as they work positively as a locus of their own internal control (Fatimah & Azaman, 2006; Saemah & Zakri, 2013; Zakri & Saemah, 2015; Zakri & Saemah, 2018) and used in facing any situation and challenge in their lives (Flavell, 1985; Wellman, 1985; Saemah, 2004; Zainah, 2006, Downing et al. 2007, Majid et al. 2015; & Prem & Amit 2015; Ben-Eliyahu, 2019).

Although the findings of this study showed that meta-behavior skills are directly related to decision-making skills among students in the UDST category (as these students used their meta-knowledge skills and meta-behaviour skill wisely, their decision making skills will become better as revealed by UDSTR1 and UDSTR2). It is found that students in these category also decided to make disciplinary mistakes at a controlled level (Zakri & Saemah 2013). This is likely due to the fact that the meta-behavioral skills among them have not yet developed in balance. For example, based on the results of the interview data, it was found that students in the UDST category used more declarative knowledge than procedural and conditional knowledge. Declarative knowledge is knowledge of concepts and facts only, while procedural knowledge is knowledge of ways and knowledge of the conditions for action. Thus, such an imbalance may influence the students of the UDST category to make unfortunate decisions at certain times and in some cases.

Although the findings showed that meta-behavioral skills are directly related to the decisions made by students in the UDST category, however these skills are not automatically developed. The skills that have been present in one's life since childhood (Flavell, 1985; Wellman, 1985)



need to be taught. Teachers need to teach and apply these skills to their students so that they become 'metacognitive' (Wilson, 2011) in making decisions on their own, especially in approaching of the Industrial Revolution 4.0 wave, which virtually eliminates the physical, digital and biological limitations (Anealka, 2018).

## CONCLUSION

Overall, it is discovered that the undeliquent students do have and use the meta-behavior skills (meta-knowledge behaviour skill and meta-behaviour skill) wisely when they are making decision. However, some of them were having difficulty when making decision especially they were still steering disciplinary issues at school. This occurrence might due to their imbalance usage of meta-behaviour skills while making decisions. The findings designated that the meta-behaviour skills need to be taught so that these students able to use the skills to the optimum in facing the current life and education challenges. Therefore, educators should not neglect the educational aspect of this meta-behavior towards UDST students simply because they are considered to be a group of students who are capable of making positive decisions without any guidance and expect they will not cause any problems.

## REFERENCES

- Abdul Salam, H., Rozumah, Rumaya, Mansor, Jo-Pei, Asnarulkhaldi & Amna. (2010). *Kemahiran berfikir : Kreatif, kritis, inovatif*. Selangor Darul Ehsan : Pusat Pengajian Umum, Universiti Kebangsaan Malaysia.
- Aida, A. & Norhayati. (2018). Industrial Revolution 4.0 and education. *International Journal of Academic Research in Business and Social Sciences*. Vol.8 : 314 – 319.
- Anelka. (2018). Education 4.0 made simple : Ideas for teaching. *International Journal of Education and Literacy Studies*. 6(3) : 92 – 98.
- Bartha, K. & Carroll, M . (2007). Metacognitive training aids decision making. *Australian Journal Of Psychology*. Vol.59 : 64-69.
- Ben-Eliyahu. (2019). Individual differences and learning contexts : Self-Regulated Learning perspective. *Teacher College Record*.
- Callan, G.L, Marchant, G.J, Finch, W.H. & German, R.L. (2016). Metacognition, strategies, achievement and demographics : Relationships across countries. *Education Sciences : Theory and Practice*. 16 (5) : 1485 – 1502.
- Downing, K., Ho, R., Shin, K., Vrijmoed, L. & Wong, E. (2007). Metacognitive development and moving away. *Educational Studies*. 33 (1) : 1-13.
- Fatimah, Y. & Azaman, A. (2006). *Tingkah laku delinkuen remaja, kefungisian keluarga dan personaliti*. Dlm. Rohany Nasir & Fatimah Omar (pnyt.). *Kesejahteraan manusia : Perspektif psikologi*, hllm. 93 - 102. Bangi : Penerbit Universiti Kebangsaan Malaysia.
- Flavell, J.H. (1979). Metacognition and cognitive monitoring : A new area of cognitive-developmental inquiry. *American Psychologist*. 34 (10) : 906-911.
- Flavell, J.H. (1985). *Cognitive development*. Second Edition. New Jersey : Prentice Hall, Inc. : Englewood Cliffs.
- Mazumder, Q.H. (2012). Improving confidence level and performance of first generation and female students using metacognition strategies. *Abstract ASEE Annual Conference and Exposition, Conference Proceeding*. [http:// www. scopus. com](http://www.scopus.com). [www. ezplib . ukm.my/record/display.url?eid=2-s2](http://www.ezplib.ukm.my/record/display.url?eid=2-s2).
- Muhamed, A. (1990). *Siri analisis psikologi : Membuat keputusan*. Kuala Lumpur : Dewan Bahasa dan Pustaka.

- Pena-Ayala, A. & Cardenas, L. (2015). A conceptual model of the metacognitive activity. In Pena-Ayala, A. (editor). *Metacognition : Fundaments, application and trends – a profile of the current state-of-the-art*. Switzerland : Springer International Publishing.
- Prem & Amit. (2015). Mathematics problem solving using metacognition aspect. *Binary Journal of Data Mining & Networking*. 5 (2015) 05-07. <http://www.arjournals.org/index.php/bjdmn/index>.
- Roslina, R., Subahan & Effandi, Z. (2010). Hubungan antara kepercayaan matematik, metakognisi dan perwakilan masalah dengan penyelesaian masalah matematik. *Jurnal Pendidikan Malaysia*. 35 (2) : 1 – 7. [http://www.ukm.my/jurfpnd/Jilid%2035\(1\),%202010/Bab%201.pdf](http://www.ukm.my/jurfpnd/Jilid%2035(1),%202010/Bab%201.pdf)
- Saemah, R. (2004). Hubungan antara metakognisi, motivasi dan pencapaian akademik pelajar Universiti. Tesis Penyelidikan Doktor Falsafah Fakulti Pendidikan: Universiti Malaya.
- Saemah, R. & Phillips, J.A. (2006). Hubungan antara kesedaran metakognisi, motivasi dan pencapaian akademik pelajar universiti. *Jurnal Pendidikan*. 31 : 21-39. [http://www.ukm.my/jurfpnd/journal/vol%2031%202006/JPenidikan31\[isukhas\]/Jpend31\[02\].pdf](http://www.ukm.my/jurfpnd/journal/vol%2031%202006/JPenidikan31[isukhas]/Jpend31[02].pdf).
- Saemah, R. & Zakri, A. (2013). Meta-behavioural skill : Students without Problem Behaviour vs. Students with Problem Behaviour. *The New Educational Review*. Vol.33 (3) : 97 – 107.
- Schwonke, R., Ertelt, A., Otieno, C., Renkl, A., Vincen, A. & M.Salden, R.J.C. (2013). Metacognitive support promotes an effective use of instructional resources in intelligent tutoring. *Learning and Instruction*. 23 : 136 – 150. [http://ac.els-cdn.com/S0959475212000655/1-s2.0-S0959475212000655-main.pdf?\\_tid=76ca5948-8ff4-11e2-9868-00000aacb35d&acdnat=1363629270\\_54e072aba78d2b0ad5a137f0328c403e](http://ac.els-cdn.com/S0959475212000655/1-s2.0-S0959475212000655-main.pdf?_tid=76ca5948-8ff4-11e2-9868-00000aacb35d&acdnat=1363629270_54e072aba78d2b0ad5a137f0328c403e).
- Shabnum, I. (2015). The importance of metacognitive strategies to enhance reading comprehension skills of learners : A self-directed learning approach. *Journal of English Language and Literature*. 2 (3) : 191 – 195. <http://www.jellonline.com/index.php/jell/article/viewFile/23000000083/28>.
- Susser, J.A. & McCabe, J. (2012). From the lab to the dorm room : metacognitive awareness and use of speed study. <http://www.gwern.net/docs/2012-susser.pdf>.
- Wellman, H.M. (1985). The origin of metacognition. Dlm. Pressley, D.L., MacKinnon, G.E. & Waller, G.T. (pnyt). *Metacognition, cognition and human performance (Volume 1) – Theoretical perspectives*, hlm. 1-31. Orlando : Academic Press Inc.
- Zainah, Y. (2006). Kesedaran metakognisi dan pencapaian pelajar dalam penyelesaian masalah matematik bagi topik kebarangkalian. Kertas Projek Sarjana Fakulti Pendidikan. Universiti Kebangsaan Malaysia.
- Zakri, A & Saemah, R. (2013). Salah laku dalam kalangan pelajar sekolah menengah. *Jurnal Melewar*. 16 :111 – 127.
- Zakri, A. & Saemah, R. (2015). Kemahiran meta-tingkah laku dan kemahiran membuat keputusan pelajar bermasalah disiplin dan tidak bermasalah disiplin. *Jurnal Pendidikan Malaysia*. 4 (2) : 175 – 183.
- Zakri, A. & Saemah, R. (2018). Kemahiran meta-tingkah laku dan kemahiran membuat keputusan. *Bangi : Penerbit Universiti Kebangsaan Malaysia*.

# Adversity Quotient, Expression of Emotion, and Family Functioning in Schizophrenia Caregiver

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## Abstract

The purpose of this research was to determine the relationship between the adversity quotient, emotional expression, and family functioning in the schizophrenia caregiver in the Outpatient Ward of Mental Hospital H.B. Saanin Padang. This research was conducted at the Mental Hospital of H.B. Saanin Padang, which were involved in 93 the research subjects. The data retrieval is done by using an adversity quotient scale, expression emotion, and family functioning. The data analysis method in this research is using the Pearson Product Moment correlation analysis. The results of the study prove that (1) The adversity quotient is positively related to the family functioning in schizophrenia caregiver ( $r = 0.569$ ;  $p < 0.01$ ); (2) The emotional expression is negatively related to the family functioning in schizophrenia caregiver ( $r = -0.263$ ;  $p < 0.05$ ).

**Keywords:** *Adversity quotient, caregiver, expression of emotion, family functioning, schizophrenia*

## INTRODUCTION

Based on a survey that was conducted by the Health Research and Development Agency, the Ministry of Health of the Republic of Indonesia in 2013, the average prevalence of severe mental disorders (psychotic/schizophrenia) in Indonesia reached 0.17% or around 420,000 people, while in the West Sumatra Province had a prevalence of 0.19 % or around 9,000 people (Baseline Health Research, 2013). Based on the Medical Record of Outpatient Ward at the Mental Hospital Prof. H.B. Saanin Padang, it is known that there was an increase in the number of outpatient visits from January 2017 to August 2018. In 2017, the number of visits by schizophrenia patients was recorded at 14,295 people (56.5%). Whereas in January-August 2018, the number of visitations was 12,181 (66%). Based on these data, it can be seen that schizophrenia is one of the most common mental disorders which happens in West Sumatra.

Schizophrenia is defined as a psychotic disorder which is characterized by the major disturbances in mind (the emergence of various thoughts that are not logically interconnected; incorrect perceptions and attention), emotional disturbances (flat or inappropriate affect), and the behavioral disorders (mismatching motor activities and behavior, such as a disheveled appearance). Several symptoms can describe the schizophrenia, which is divided into the positive symptoms, namely hallucinations and delusions, negative symptoms, disorganized symptoms, catatonic symptoms and motion symptoms (Davison, Neale, & Kring, 2012).

Simultaneously, schizophrenia symptoms have a profound impact on the lives of sufferers, their families, and friends (Davidson et al., 2012). The people with schizophrenia face the real obstacles or inhibitions in the level of functional ability in the field of work, social relations, financial, ability to care for themselves, and other fields, that will cause difficulties in the

personal of themselves, family, and the social life of the sufferers. As for those who in most aspects of their lives are generally tasked with providing care and support for the people with schizophrenia (in Awad & Voruganti, 2008) which is greater than due to decreased patient function (Goodhead & McDonald, 2007<sup>[4]</sup>) called as the caregivers.

A caregiver is also known as an informal supporter for the sufferers who need care and are responsible for the needs of sufferers, and also spends most of their time and duties caring for the sufferers (Dwyer, in Afriyeni & Sartana, 2016), both in physical and emotional supports (Davidson et.al., 2012). The caregiver who plays an important role in helping care of the sufferers at home seek treatment, help with daily needs when the sufferers are unable to perform their functions optimally is the family of him/herself (Afriyeni & Sartana, 2016).

The impacts felt by the sufferer's family as a caregiver one of it lies in changing the roles that must be carried out by every individual in the family, such as the mothers who initially work. They are forced to quit their jobs due to having to look after and care for the patient. It makes for the family difficult to provide financial care and treatment of the family members who are suffering from schizophrenia (Caqueo-Urizar & Gutierrez-Maldonado, 2006). The presence of schizophrenia in the family also has an impact on the functioning of the family as a caregiver (Pinsof & Lebow, in Millati & Fellianti, 2013). Family functioning is the extent to which interactions in the family have an impact on the physical and emotional health of the family members (Ryan, Epstein, Keitner, Miller, & Bishop, 2005). The functioning in a family that is a caregiver for the person with schizophrenia can be a measure of whether the family functions effectively or vice versa (Epstein, Ryan, Keitner, Miller, & Bishop, 2005). The ineffective family characteristics refer to the common characteristics or the general interactions among family members which are related to the disruption of functions in one or more dimensions of the family functioning, such as problem-solving, communication, roles, affective responsiveness, affective involvement, and behavior control (Miller, Ryan, Bishop, Bishop, Keitner, & Epstein, 2000).

When treating/caring for a person with schizophrenia, the caregivers will face many problems, which can originate from within themselves and the environment that will cause the caregiver to give up because of that situation. Caregivers must face while caring for the family members who have schizophrenia, such as getting treatment and negative attitudes from the environment, feeling the impact of caring for the sufferers, bearing the financial burdens, and experiencing losses due to caring for the sufferers. These problems can later disrupt the process of activities and interactions in the daily family life Gitasari and Siti (2015).

Facing the problems above is not an easy thing for the caregivers. They need the ability to be able to adapt to the obstacles and problems that they face so they can turn the challenges into opportunities for reaching success (Stoltz, 2007). The difficulties they experience in the family and the community environment do not become obstacles to keep trying to cure illnesses for those who are suffering from schizophrenia.

Adversity quotient is the intelligence of individuals in observing difficulties and processing these difficulties with the intelligence they have so that it becomes a challenge to solve them (Stoltz, 2007). The caregivers who have a high level of adversity quotient will try to find other ways to help the family members who have schizophrenia. Also, they can motivate themselves, have high spirits, and struggle to cure the sufferers. While the caregivers with the low of adversity quotient will only feel satisfied with what they have gained when caring for the family members who are suffering from schizophrenia, and also they will even feel indifferent to the condition of the sufferers (Suhita, Chatarina, Basuki & Yusuf, 2017).

Indifference attitude is a form of the emotional expression that is displayed by the caregivers to sufferers, where they assume the sufferer is the person responsible for controlling the disorder that they experience. The emotional expressions are defined as the expressions that refer to the overall index of certain emotions, attitudes, and particular behaviors which are expressed by the family members (caregivers) to other family members who are diagnosed with schizophrenia (Brown, in Azhar & Varma, 1996).

Emotional expression in question is how the family members who become the caregivers of schizophrenia by expressing their attitudes and emotions, such as criticizing, hostile, making positive / or negative comments, warmth, and expressing the emotions excessively (Amaresha & Venkatasubramanian, 2012). Butzlaff and Hoeley (1998) in *Expressed Emotion and Psychiatric Relapse* which is their meta-analysis article of 27 studies mention that the emergence of critical comments, cynical, sharp, and excessive emotional involvement that arises through the spontaneous words from the family members or caregivers while caring the schizophrenia patients is a manifestation of an expression from the high emotions that arise in the family.

The families with high emotional expressions, in the form of critical comments from the family members, especially as the caregivers, can trigger an increase in the expression of unusual thoughts by the sufferers (Davison et al., 2012). Therefore, it is better to deal with or handling the sufferers. The caregivers can display proportional emotional expressions such as being patient, accepting the sufferers, giving positive responses to the sufferers, respecting the sufferers as the family members, and not overprotecting them. Besides that, the high adversity quotient is also needed for the caregivers in seeking treatment and fulfilling the patient's needs. So that the family interactions get better, and it is hoped that the family functioning will be more effective.

Based on the description above, the purpose of this study is to prove scientifically about the relationship between the adversity quotient, emotional expression, and family functioning in schizophrenia caregiver in the Outpatient Ward at the Mental Hospital of H.B. Saanin Padang. The hypotheses of this study are, (1) There is a relationship between the adversity quotient and the family functioning in schizophrenia caregiver and, (2) There is a relationship between the emotional expression and the family functioning in schizophrenia caregiver.

## **METHOD**

The research method used is quantitative research methods. The approach used in this study is a quantitative correlation approach that aims to detect how far the variations in a variable are related to the variations in one or several other variables based on the correlation coefficient (Suryabrata, 1997). The variables in this study consisted of the independent variables, namely, adversity quotient and emotional expression, while the dependent variable was the family functioning.

The study was conducted at the Mental Hospital of Prof. H.B. Saanin Padang. The subject of this research is the caregiver, with the characteristics of the subjects, among others; having a family member with the history of schizophrenia (evidenced by a statement from the Mental Hospital of HB Saanin Padang related to the patient status), living at home together or most often associated with people with schizophrenia, ex, parents, spouses or siblings, willing to be the subject of the research by signing the letter of consent, and over the age of 17 years old (mature) to the elderly age.

The measuring instruments used in this study are the scale of adversity quotient based on the theory of Stoltz (2007), Family Assessment Device (FAD), Family Questionnaire (FQ) by

Wiedemann (2002). The data analysis method in this research is the Pearson Product Moment correlation analysis.

## RESULT

The subjects in this study were 93 people who were family members who cared for people with schizophrenia in their families. The research hypothesis test shows the correlation coefficient between the adversity quotient with the family functioning in schizophrenia caregiver of 0.569 with  $p = 0.000$  ( $p < 0.01$ ). The correlation coefficient and the significance value indicate that there is a significant positive relationship between the adversity quotient with the family functioning. A positive value indicates that the higher the adversity quotient of the caregiver, the higher the functioning of the family, which is perceived by the caregiver. On the other hand, the lower the adversity quotient in schizophrenia caregiver, the lower the functioning of the family him/herself.

In addition, the correlation coefficient between the emotional expression and the family functioning was -0.263 with  $p = 0.011$  ( $p < 0.05$ ). The correlation coefficient and the significance value indicate that there is a significant negative relationship between emotional expression and family functioning. It shows that the higher the emotional expression of the caregiver, the lower the functioning of the family that is perceived by the caregiver. The lower the emotional expression of the caregiver, then, the higher the functioning of the family.

Based on the research data, the research subjects can be grouped as follows:

**Table 1. Adversity Quotient Caregiver Schizophrenia**

ADVERSITY QUOTIENT	Frequency (f)	Percentage (%)
Quitters	9	9.7%
Champers	81	87.1%
Climbers	3	3.2%
<b>TOTAL</b>	93	100%

Based on the above categorization, it can be seen that the average subject is at the level of champers as many as 81 people (87.1%).

**Table 2. Expression of Emotions the Caregiver Schizophrenia**

EXPRESSION OF EMOTIONS	Frequency (f)	Percentage (%)
Low	33	35%
High	60	65%
<b>TOTAL</b>	93	100%

Based on the data obtained, it can be seen that the expression of emotions of schizophrenia caregivers is mostly in the high score group of 60 people (65%).

**Table 3. Family Functioning Caregiver Schizophrenia**

FAMILY FUNCTIONING	Frequency (f)	Percentage (%)
Low	7	2.2%
Medium/Moderate	84	90.3%
High	2	7.5%
<b>TOTAL</b>	93	100%

Based on the table above, it can be seen that the functioning of the schizophrenia caregiver family is in the moderate category as many as 84 people (90.3%).

The general description of the research subject is described in detail below, which is in the form of distribution of the research subjects based on sex, relationship with the sufferers, and the age as follows:

**Table 4. The General Characteristics of the Research**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender/Sex</b>		
Male	18 people	19.4%
Female	75 people	80.6%
<b>Relationship with the sufferer</b>		
Wife	15 people	16.1%
Husband	7 people	7.5%
Children	41 people	44.1%
Brother/Sister	20 people	21.5%
Parents	10 people	10.8%
<b>Age</b>		
Early Adulthood	21 people	22.6%
Middle adulthood	63 people	67.7%
Late adulthood	9 people	9.7%

Based on the entire research subject, it can be seen that there are 18 people (19.4%) who are female, and 75 people (80.6%) are female from 93 people of the study subjects. Based on the overall data obtained from the research subjects, it can be seen that the most common schizophrenia caregivers were 41 children (44.1%), and the least were 7 husbands (7.5%).

Based on the data obtained, the study subjects were divided based on the age range of early adulthood, middle adulthood, and late adulthood. It can be seen that the most research subjects based on the age level are subjects in the middle adulthood as many as 63 people (67.7%), and the least research subject is in late adulthood as many as 9 people (9.7%).

## **DISCUSSION**

The results of correlation analysis show that the adversity quotient has a significant relationship with the family functioning, and it is classified as moderate because the correlation coefficient is ( $r = 0.569$ ). Thus, it can be interpreted that the contribution of the adversity quotient to family functioning is not so high and not so low, but it will affect the family interaction. Fahrudin (2012) stated that the functioning of the family would ensure the family to perform its functions in daily life so that the family has the ability/function to deal with any problems, being able to manage the problem resources, setting goals and seeing the challenges as the opportunities to maintain and improve the quality of life and the welfare of its members.

During treating/caring for the people with schizophrenia, caregivers will experience many difficulties and obstacles, both in terms of finances, daily activities, and the disruption of the interaction among families. The adversity quotient is needed to be able to adapt to the obstacles faced while treating/caring for the person with schizophrenia. Based on the results of the study, it is known that the adversity quotient in schizophrenia caregiver in the Outpatient Ward of

H.B Mental Hospital Saanin Padang is in the campers category with 81 people (90.3%). The results of this study are in line with the research conducted by Suhita et.al (2017) that 91.9% of schizophrenia caregivers are in the campers category. The campers are individuals who feel quickly satisfied with what they have achieved, so they tend not to develop their full potential. Stoltz (2007) adds that the adversity quotient has an important role in predicting how far an individual can survive facing the difficulties and how much his/her ability to solve the problems. The ability of the family's adversity quotient will be seen from the way the families provide care for the people with schizophrenia. The role of the adversity quotient will be needed by the schizophrenia caregivers to be able and to improve the functioning of the family roles to improve the family welfare and its effectiveness.

Family functioning, mostly in schizophrenia caregivers, is in the moderate category (90.3%). It shows that caregivers have the families who can carry out the roles and the functions within a family but are not yet optimal. The role of family functioning is not yet optimal can be caused by emotional distress and frustration when treating/caring the schizophrenia patients. So that the caregivers have their burden when living with the people with schizophrenia (Osman et al., 2010).

Besides being influenced by the adversity quotient, the family functioning of schizophrenia caregivers can be influenced by other factors. Juwarti, Wuryaningsih, A'la (2018) argued caregivers who are unable to manage their emotions would feel unpleasant psychological conditions in an effort adapting to the demands of his/her role as a caregiver. The results of the correlation analysis between the emotional expression and the family functioning have a significant relationship but relatively in the lower level, with a correlation coefficient of -0.263. In addition, the relationship between emotional expression and family functioning is negatively correlated. It means that the higher the emotional expression of the schizophrenia caregiver, then, the lower the level of the family functioning. Kavanagh, Parker, and Hadzi-Pavlovic (in Millati & Fellianti, 2013) mentioned that the families who have high emotional expression are the non-functional families, where they have an ineffective family functioning and becoming a bad predictor in supporting patient recovery.

Based on the results of the research, it is known that the emotional expression of the schizophrenia caregivers in the Outpatient Ward of the H.B. Mental Hospital Saanin Padang is in the high category of 60 people (65%). McDonagh (2003) states that the families who have high emotional expressions are the families who often display a critical and hostile attitude towards the people with schizophrenia. In addition, families with high emotional expression are the families that also involve emotions that are too big in responding to the sufferer's behavior—especially the negative behavior which is displayed by the sufferers (Hertinjung & Partini, 2010). McDonagh (2003) also mentioned that the high emotional expression would arise if the parents or the other family members (i.e., caregivers) assumed that the disorder experienced by the patients was a disorder originating from the internal factors of the patients and should be controlled by patients. In this case, the caregivers assume that the way to criticize will be able to change the attitude of patients (the negative attitudes displayed by the patients). The intended criticism is not solely about the disorder that is experienced by the sufferers (negative symptoms of the disorder) but also concerns the negative criticism for the individual's personality.



### *Implications for Theory, Application, or Policy*

Based on the results of the research, the following conclusions are obtained:

1. There is a significant relationship between the adversity quotient and the family functioning in schizophrenia caregivers at the Outpatient Ward of the H.B Mental Hospital Saanin Padang.
2. There is a significant relationship between the emotional expression and the family functioning in the schizophrenia caregiver at the Outpatient Ward of the H.B Mental Hospital Saanin Padang.
3. The majority of schizophrenia adversity quotient of the caregivers are at campers or moderate levels (87.1%).
4. The emotional expressions displayed by the majority of schizophrenia caregivers are in the high category (65%).
5. The family functioning that is experienced by the majority of the schizophrenia caregivers is in the moderate category (90.3%).
6. The demographic data obtained that the majority of caregivers are women. The relationship with the people with schizophrenia is as a child, and most caregivers are coming from the middle-aged.

### **CONCLUSION**

This research is expected to contribute to the development of the study of psychology. It can make theoretical contributions, especially regarding the adversity quotient, the emotional expression, and the family functioning. For further researchers who are interested in this issue, it is further good for broadening the theoretical review that is not yet available in this study. Furthermore, by refining the measuring instrument, and increasing the sample of research so that the scope of the research and its generalization becomes wider.

### **REFERENCES**

- Afriyeni, N., & Sartana. (2016). The picture of pressure and burden experienced by the families as the caregivers of the psychotic patients at Mental Hospital of Prof. H.B. Sa'anin Padang. *Jurnal Ecopsy*, 3 (3), 115-120.
- Amaresha, A.C. & Venkatasubramanian, G. (2012). Expressed emotion in schizophrenia: An overview. *Indian Journal of Psychological Medicine*, 34, 12-21.
- Awad, A. G. & Voruganti, L. N. P. (2008). The burden of schizophrenia on caregiver. Review Article.
- Azhar, M.Z. & Varma, S. L. (1996). Relationship of expressed emotion with relapse of schizophrenia patients in Kelantan. *Singapore Med*, 37, 82-85.
- Baseline Health Research 2013 (RISKESDAS). (2013). Jakarta: Ministry of the Health's Republic of Indonesia, Research and Development Institute.
- Butzlaff, R.L, AM;., Hoooley, J.M DPhil. (1998). Expressed emotion and psychiatric relapse: A meta-analysis. *Arch Gen Psychiatry*, 55, 547-552.
- Caqueo-Urizar, A., & Gutierrez-Maldonado, J. (2006). Burden of care in families of patients with schizophrenia. *Quality of Life Research*, 15, 719-724.

- Davison, G.C., Neale, J.M., & Kring, A.M. (2012). *Abnormal Psychology* (Ed.9). Jakarta: PT Raja Grafindo Persada.
- Epstein, N., B., Ryan, C. E., Keitner, G. I., Miller, I. W., Bishop, D. S. (2005). *Evaluating and Treating Families: The Master Approach*. New York: Routledge.
- Gitasari, N. & Siti, I.S. (2015). The experience family caregiver of the people with schizophrenia. *Journal of Character*, 3, 1-8.
- Goodhead, A., & McDonald, J. (2007). *Informal caregivers literature review: A report prepared for the national health committee*. Health Service Research Centre, Victoria University of Wellington.
- Millati, S., & Fellianti M. (2013). The family functioning in families with the outpatient schizophrenia patients in Jakarta. *Journal of Psychology Research and Measurement*, 2 (2), 80-88.
- Miller, I. W., Ryan, C.E., Keitner, G. I., Bishop, D. S., Epstein, N. B (2000). The McMaster approach to families: Theory, assessment, treatment, and research. *Journal of Family Therapy*, 22.
- Ryan, C. E., Epstein, N. B, Keitner, G.I., Miller, I. W., & Bishop, D. S. (2005). *Evaluating and treating families: The McMaster approach*. New York: Routledge Taylor& Francis Group.
- Stoltz, P.G. (2007). *Adversity quotient: Turning the obstacles into opportunities*. Jakarta: Grasindo.
- Suhita, B.M., Chatarina, U.W., Basuki, H. & Yusuf, A. (2017). The adaptation model of caregiver in treating family members with schizophrenia in Kediri East Java. *Journal Ners*, 12(1), 74-80.

# The Correlation of Assertive Behavior and Online Gaming Addiction with Cyberbullying Behavior at Social Media in Adolescents in Padang City

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## Abstract

The correlation of assertive behavior and online gaming addiction with cyberbullying behavior at social media in adolescents in Padang City. This study aims to determine the relationship between assertive behavior and online gaming addiction with cyberbullying behavior in social media in adolescents in Padang City. This research is a quantitative correlational type. Subjects of this study amounted to 61 adolescents in Padang with age range 14-18 years. Sampling method using purposive sampling. Data collection used assertive behavior scale, scale online gaming addiction, and cyberbullying behavior scale. Data analysis using multiple correlations. The result showed assertive behavior and online gaming addiction-related stimulus and significant to cyberbullying behavior with  $p=0,000$  ( $p<0.05$ ). It means that the lower of assertive behavior and higher online gaming addiction contribute to the higher cyberbullying behavior in adolescents.

**Keywords:** *Assertive, game online, cyberbullying*

## INTRODUCTION

The technology of our world today has been the heart of life for every individual, especially in the technology of information and communication. The technology of information and communication made it easier for everyone to get information without limitation of distance and time. Besides, give many benefits to the technology of information and communication also has a negative impact. Since 2003, the act of cyberbullying is one consequence that has greatly increased due to the development of technology and information. (Betts, 2016).

Cyberbullying is an aggressive communication act that is repeatedly carried out by a person or group of people through electronic media that hurts and creates discomfort for that person (Tokunaga, 2010). Meanwhile, according to Margono, Yi, and Raikundalia (2014), cyberbullying is an act of intimidating others through social media by sending attacking words, pictures, or videos. Someone who insults or send threatening messages to others through electronic media that hurt, creates discomfort, and makes others anxious it is said as cyberbullying abuser.

Cyberbullying has a negative impact, where victims of cyberbullying tend to experience welfare and health problems (add reference). The worst (impact) of cyberbullying can also cause someone to commit suicide. One of the victims of a cyberbullying case that committed suicide in Canada is Senior High School Students named Amanda Todd (Redaksi 2014). In Padang city, based on the research of Sartana & Efriyeni (2017) to 353 Junior High School student with an age range of 12 – 15 years old showed that 275 respondents (78%) claimed to

have seen cyberbullying, 76 respondents (21%) had been cyberbullying abuser, and 172 respondents (49%) had been victims.

Karyanti (2014) stated that one of the factors that caused cyberbullying was because the abuser or victims of cyberbullying (male or female) did not have assertive behavior skills. Assertive behavior is the ability to express and respect the personal feelings and rights of others (Pipa & Jaradat, 2010). Someone who has the ability to assertive behavior can reduce interpersonal conflict in their life so that they able to eliminate the source of stress. Alberti and Emmons (2002) said that assertive behavior promotes the equality in human relationships that allows individuals to act on their own behalf, defend themselves without undue anxiety, express their feelings honestly and comfortably, and doing their personal rights, without disturbing others.

Based on Sinaga's research in 2016, one of the factors that influence teenagers doing cyber bullying behavior is assertive behavior itself. The most they increased their assertive behavior, the most they decreased their cyberbullying, and vice versa. The teenager's life often said to be a period of rebellion because, in this time, it involves emotional change, conflict in the family, the pressure from society and adults, indifferent, and rejection behavior of adult values. (Papalia, Old, & Feldman, 2011).

According to the results of a survey of against bullying agencies in the UK, someone gets cyberbullying through profile comments 39%, photo comments 34%, personal messages 68%, profile errors 18%, and games online 23% (Ditchthelabel, 2017). Meanwhile, Priyatna (2010) also explains that the tools used to do cyberbullying are mobile phones, SMS, Image clips, e-mail, Instant Messaging, Chat Rooms, websites, and games online. A survey conducted by Ditch, the label in 2017 for 10.020 school and college students in the UK aged 12-24 years old, found that 25% of the subject ever doing the bullying to someone in the online game. (Hackett, 2017). Hunter (2012) also states that one of the tools used for cyberbullying is games online.

Furthermore, Ditch the label in collaboration with Hobbo game in 2017 survey 2.515 gamers in the UK aged 12 – 25 years old regarding the experiences of gamers who were targeted, witnessed, and bullying in the online gaming environment and found that 57% of the subjects claimed to have bullied in the games online. The online game is a type of game that uses a network, which uses the connectivity of two or more computers (Armitage, Claypool, and Branch, 2006). Someone who addicted to online games is called as online gaming addiction. Addictive to online games harm individuals, such as skipping school and lazy learning (add reference). Research conducted by Adnesia (2011) found that online gaming addiction among students of SMPN 11 Padang was in the high category of 22 students. One of the phenomena in Padang City, West Sumatera, was 11 years old boy stolen his neighbor laptop due to addicted to online gaming (Sunandar, 2016).

Various effects are arising from online gaming addiction. Those who are addicted are less interacting and communicate with people around them like their parents and friends (add reference). The students also said that he prefers to play games online. When playing the games, unconsciously, his emotions carry over with the games that make these students tend to be easily offended, and angry. This condition makes their emotions become uncontrolled, even they tend to curse, saying bad words to the game's playmates, which is one form of cyberbullying (Misnawati, 2016).

The other effects of games online addiction are not going to school, lying, stealing, committing fraud, uncontrolled body health, using bad words as usual when interacting with fellow gamers (cyberbullying) (Soleh, 2012). Players who are already addicted to games online will have uncontrolled acts, such as aggressive, passive, insulting, and cheating, which will lead to cyberbullying (Sulistiyawati, 2013). One of the problems that can be experienced by teenagers

is engaging in cyberbullying behavior. The research of Linfords et al. (2012) explained that the highest proportion of cyberbullying was between the ages of 14 -18 years, both men and women.

The current research focuses on the correlation between assertive behavior and online game addiction to cyberbullying behavior in adolescents.

## METHODS

This research is using quantitative methods. The research design used a correlational research design by classifying the research variables into two groups, namely independent and dependent variables. Correlational research is a type of research that looks at the relationship between one or several variable changes with one or several other changes (Yusuf, 2010).

The sample in this research is adolescents in Padang city with an age range of 14 – 18 years, spending more than 20 hours a week playing online games, actively using social media for at least one year, and have social media for at least Instagram, Facebook, and WhatsApp. The sample was selected using purposive sampling.

Data was collected from scale of assertive behavior, cyberbullying, and online gaming addicted. The researchers drafted all three scales and then conducted trials on 30 people. For online gaming addiction scale, from 40 items, 7 items declared invalid and 33 items valid. For assertive behavior scale, from 40 items, 7 items invalid, and 33 items valid. Then for cyberbullying scale, from 42 items, 5 items invalid, and 37 items valid. For assertive behavior scale refers to Alberti & Emmons (2002) that have 5 aspects like express the feelings honestly and comfortably; able to defend personal rights; act following interests and likely; doesn't violate anyone's rights; support equality among people. For cyberbullying, scale refers to Betts (2016) that have 3 aspects like repetition, power imbalance, intention. For online gaming, scale refers to Griffiths (in Young & Abreu, 2011) that have 5 aspects like salience, mood modification, tolerance, conflicts, time restriction.

## RESULTS

**Table 1. Participants Description Base On Sex**

No.	Sex	Amount	Percentage
1.	Male	26 people	42, 62%
2.	Female	35 people	57, 38%

**Table 2. Participants Description Base On Age**

No.	Age	Amount	Percentage
1.	14 years	7 people	11, 47%
2.	15 years	11 people	18, 03%
3.	16 years	10 people	16, 39 %
4.	17 years	15 people	24, 59 %
5.	18 years	18 people	29, 50 %

The result shows the magnitude of the relationship between assertive behavior and games online addiction to cyberbullying behavior calculated by the correlation coefficient was 0.656, which indicates the biggest influence. Meanwhile, the contribution or simultaneous contribution of assertive behavior and online gaming variables to cyberbullying behavior is 43%, while 57% is determined by other variables which not examined in this research.

In this research, it was accepted that assertive behavior and online game addiction were simultaneously and significantly related to cyberbullying behavior. It is because the probability value (sig. f change) is  $p = 0.000$ , which means it is smaller than 0.05.

## DISCUSSION

This research shows the result that there is a significant relationship between assertive behavior and games online addiction to cyberbullying behavior. Sullivan et al. (in Karyanti, 2014) state that one of the factors that influences are bullying or cyberbullying behavior is the lack of assertive behavior. Lack of assertive behavior is characterized by insecurity, cannot convey feelings, and desire also cannot be open to parents, friends, teachers, and people around them. In this research, it is found that an assertive behavior of teenagers is characterized by not being able to express their opinion, it can be seen from several answers of teenagers on the scale of assertive behavior.

A teenager who can behave assertively, then he will also be able to express feelings, tell the desires and needs that are needed so that the others know what the needed by the individuals and finally established good interpersonal relationships with others. Good interpersonal relationships can provide feelings of pleasure or positive self and others (Mariani & Andriani, 2005).

Some of the participants have a good interpersonal relationship, where they can convey what they need and want to others. As seen from some items, the scale of assertive behavior, including being able to give criticism to others, ask for help from others if they have difficulties, when confused about something they will ask others, and apologize if doing guilty. The teenagers who always happy or positive thinking tend not to have psychological tension, which can cause frustration so that the aggressive drive caused by psychological tension is also decreased.

A teenager who addicted to games online is involved in cyberbullying acts both as a perpetrator and a victim. Cyberbullying actions that often occur in games online is using bad word easily and calling their opponent with bad nicknames.

Soleh (2012) found that one of the effects of online gaming is to resort to harsh words when interacting with fellow gamers or doing cyberbullying. In this research, it was found that players who are already addicted also use bad words when interacting with fellow gamers it can be seen in this word, "I intentionally sent bad word to people that I do not like in games online".

Hunter (2012) also said that one of the media used to do cyberbullying is games online. It seems like other games; players often feel frustrated with each other in the injury time of the game. At this time, most of the people will be aggressive and rude towards what they said and did during the games. This aggressive interaction is called "Flaming" which is one kind of cyberbullying (add reference). The result indicates that is a flaming where someone is sending a text message in the form of words full of anger (negative) and being frontal to others in games online as "I deliberately give the negative comments in games online to people that I do not like".

People who are addicted are less interacting and communicate with people around them like their parents and friends. The students also said that he prefers to play games online and when playing the games unconsciously his emotions carry over with the games that make these students tend to be easily offended, angry, and suddenly become happy this condition make

student's emotions become uncontrolled, even they tend to curse, saying bad words to the game's playmates who are one form of cyberbullying (Misnawati, 2016).

Adolescents are doing cyberbullying to reduce tension or to make them feel better, which can be influenced by internal motivation (Varjas et al., 2010). Internal motivations, such as the transfer of feeling, revenge, make feelings better, eliminate boredom, need some attention from others. This research also found several subjects that are doing cyberbullying because of some motivations, such as revenge against people who they do not like. It can make people feel better or satisfied. It can be seen in several cases like someone who tells about someone's disgrace in order to make another people dislike that person, and as well as someone repeatedly sending an abusive message to the dislike ones until they are satisfied.

Cyberbullying behavior consists of three aspects that are repetition, power imbalance, and intentionality (Langos, 2012; Betts, 2016). From the three aspects above, two of them have a low category in the aspect of imbalance of strength and intentional aspects, while the repetition aspect has a very low category. According to Betts (2016), intentionality relates to the extent to which the offender is aware that the action causes harm and discomfort to the target.

In the aspect of repetition, the subject's score was in the very low category. It means that the subjects in this research did not repeatedly commit cyberbullying. Langos (2012) argued that the behavior of aggression carried out only once; it was not referred to as cyberbullying but instead called cyber jocking or jokes.

Betts (2016) said the repetition in cyberbullying is associated with the contents of the message and not by the intention of the abuser. If the message is publicly available, then there will be the possibility of the consequence, and it can be revived in another time. In this research, the contents of cyberbullying messages publicly are very low.

## **CONCLUSIONS**

Based on the result of the research and hypothesis, the conclusions are:

1. There is a significant relationship between assertive behavior and games online addiction with cyberbullying behavior on social media in teenagers.
2. In general, the assertive behavior of adolescents in this research included in the high category, being an addict to games online, and cyberbullying behavior is in the middle range of category.

## **Recommendations**

Based on the result of the data and discussions that have been done, the researcher suggests:

1. For parents, it is a need for parents to pay attention to the assertive behavior to their girls compared to boys because girls are more difficult to behave assertively than boys. Parents also need to supervise their children in using technology information such as cell phones to avoid cyberbullying.
2. For teenagers, it is a need to be able to behave assertively, which is beneficial to himself and others, and it will automatically reduce the number of cyberbullying. The teenagers also advised reducing the time in playing games because it can disturb their learning activity and avoid cyberbullying behavior.
3. For the researcher, this research can be a reference to determine the construct associated with assertive behavior, games, online addiction, and cyberbullying behavior. Future

research can examine other factors that influence cyberbullying behavior such as friends, social support, and family factors that not include in this research.

## REFERENCES

- Adnesia, S. (2011). Hubungan antara regulasi diri dengan kecanduan internet (game online) pada remaja di SMPN 15 Padang. Padang: Universitas Negeri Padang.
- Alberti, R & Emmons, R,. (2002). Your perfect right: Panduan praktis hidup lebih ekspresif dan jujur pada diri sendiri. Jakarta: Elex Media Komputindo.
- Armitage, G., Claypool, M., & Branch, P. (2006). Networking and Online Games. Wiley: England.
- Betts, L. R. (2016). Cyberbullying: Approaches, Consequences and Interventions. London: Palgrave Macmillan.
- Emelia; Leonardi, Tino;. (2013). Hubungan antara Kompetensi Sosial dengan Perilaku Cyberbullying pada Remaja usia 15-17 Tahun. Jurnal Psikologi Kepribadian dan Sosial, Vol 2 no 2, 79-89.
- Folia, Rosa;. (2017). Di-bully di Media Sosial, Afi Mengaku Depresi. Dipetik Oktober 22, 2017, dari IDN TIMES: <https://news.idntimes.com/indonesia/rosa-folia/di-bully-di-media-sosial-afi-mengaku-depresi>
- Hackett, L. (2017, Juli). The annual bullying survei 2017. DitchThe Label. Retrieved from HYPERLINK "https://www.ditchthelabel.org/research-papers/the-annual-bullying-survey-2017/" <https://www.ditchthelabel.org/research-papers/the-annual-bullying-survey-2017/> .
- Hunter, N. (2012). Cyberbullying. England: Raintree.
- Karyanti .(2014). Keefektifan Keterampilan Perilaku Asertif untuk Meningkatkan Perilaku Asertif Siswa Korban Bullying di SMA. Pedagogik Jurnal Pendidikan, Vol 9 no 2, 31-41.
- Langos, C. (2012). Cyberbullying: The Challenge to Define. Cyberpsychology, Behavior, And Social Networking, 15, 285-289.
- Mariani, L., & Andriani, E. (2005). Perbedaan Asertivitas Remaja Ditinjau dari Pola Asuh Orang Tua. PsikologiA, 1 No 2, 46-53.
- Margono, H., Yi, X., & Raikundalia, G. K. (2014). Mining Indonesian cyber Bullying Patterns in Social Networks. Proceedings of the Thirty-Seventh Australasian Computer Science Conference. 147, hal. 115-124. Auckland, New Zealand: Computer Science.
- Misnawati. (2016). Hubungan Antara Kecerdasan Emosi dengan Kecanduan Game Online pada Siswa-Siswi di SMP YPS (Yayasan Pendidikan Samarinda). Psikoborneo, 4 (2), 312-329.
- Papalia, E. D., Old, S. W., & Feldman, R. D. (2011). Human Development. Jakarta: Kencana.
- Pipas, Maria Daniela; Jaradat, Mohammad;. (2010). Assertive Communication Skills. Annales Universitatis Apulensis Series Oeconomica , 649-656.
- Priyatna, A. (2010). Let's end Bullying. Jakarta: Elex Media Komputindo.
- Redaksi4, P. N. (2016, April 9). Selain Sonya Depari, Ini 5 Kasus Bully Siswa Paling Tragis yang Berujung Maut. Dipetik Oktober 22, 2017, dari PojokSatu.id: <http://sumut.pojoksatu.id/2016/04/09/selain-sonya-depari-ini-5-kasus-bully-siswa-paling-tragis-yang-berujung-maut/>
- Rosita, H. (2007). Hubungan Antara Perilaku Asertif dengan Kepercayaan Diri Mahasiswa.
- Sartana, & Afriyeni, N. (2017). Perilaku Perundungan Maya (Cyberbullying) pada Remaja. Jurnal Psikologi Insight (1), 25-41.
- Sinaga, Yohanna Viscanesia. (2016). Hubungan antara Perilaku Asertif dan Perilaku Cyberbullying di Jejaring Sosial pada Remaja. Skripsi Psikologi.



- Soleh, I. (2012). Kematangan Anak yang Terpapar Game Online untuk Menjadi Delinkuen (Studi Terhadap Tiga Orang Anak). Skripsi. Universitas Indonesia, Depok.
- Sugiyono, P. D. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R & D. Bandung: CV. Alfabeta
- Sulistiyawati, F. N. (2013). Hubungan antara Kecanduan Game Online dengan Cyberbullying pada Remaja. Jurnal Gunadarma.
- Sunandar, B. (2016). Duh, kecanduan game online bocah 11 tahun curi laptop tetangga. Sindonews.com. Diakses dari: <https://daerah.sindonews.com/read/1087546/174/duh-kecanduan-game-online-bocah-11-tahun-curi-laptop-tetangga-1456200547>
- Tokunaga, R. S. (2010). Following You Home From School: A Critical Review and Synthesis of Research on Cyberbullying Victimization: Elsevier.
- Varjas, K., Talley, J., Mayers, J., Parris, L., & Cutts, H. (2010). High School Students' Perceptions of Motivations for Cyberbullying: An Exploratory Study. 269-273.
- Young, K. S., & Abreu, C. N. D. (2011). Internet addiction. Canada: Simultaneously.
- Yusuf, M. (2010). Metode Penelitian. Padang: UNP Press..

# Millennials: Can gratitude help them overcome mental health problems?

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## Abstract

Millennials are well-known as generations with many mental health problems. Living in the digital world, Millennials tend to have more problems because of the improvement of technology, which gave them access to social media, and from social media, they feel more and more insecure with the world they live in. They feel the lack of something and never satisfied with what they have now. Gratitude is one thing that can make them feel more secure and have a positive feeling. This is qualitative research, aims to find out whether gratitude can help millennials overcome their mental health problems, and how it works. Some activities in some counseling sessions were conducted. The total participants were six people, males, and females, aged 24 to 30. The results were gratitude expression can help Millennials to overcome their mental health problems gradually.

**Keywords:** *Millennials, mental health problems, gratitude*

## INTRODUCTION

Everyone can experience mental health problems. From the lowest level of problems until a severe level, mental health problems come in many kinds and ways. The research found out that amongst different generations, mental health problems were also shown in different ways. The millennial is the generation that is prone to have more mental health problems, compared to other generations before it (Putri, 2018).

Characteristics of Millennials. Millennial is a generation with many interesting characteristics. Hoyt and McGrath (2018) defined that millennial is highly educated, self-confident, tend to be more liberal, and also ambitious. One more thing that characterized them is they are extremely connected. They own one or more smartphones, actively engaged in social media, and adopt new platforms based on IoT (internet of things). With this trend of technology development, they can access information much more easily, which also means they can find anything more easily and make comparisons about many things. They have their perceptions, and they also have their own opinions.

Mental health problems in Millennials. As mentioned earlier, The fact that technology plays an important role in Millennial's life, besides their histories of life, sometimes leads them to many mental health problems. They live in a world full of other perceptions and opinions, which are not always the same as them. Shout Out UK (2018) stated that technology used for communication is now as essential as air. The generations that have grown up with the internet have not had the opportunity to make the most of life without technology. Their lives depend on the internet. It is not uncommon for anyone to have a social media account nowadays.

Living in a digital life does not always bring comfort to millennials. They can grasp the world in their hand, but the fact is that privilege brings them to such a complicated life. For

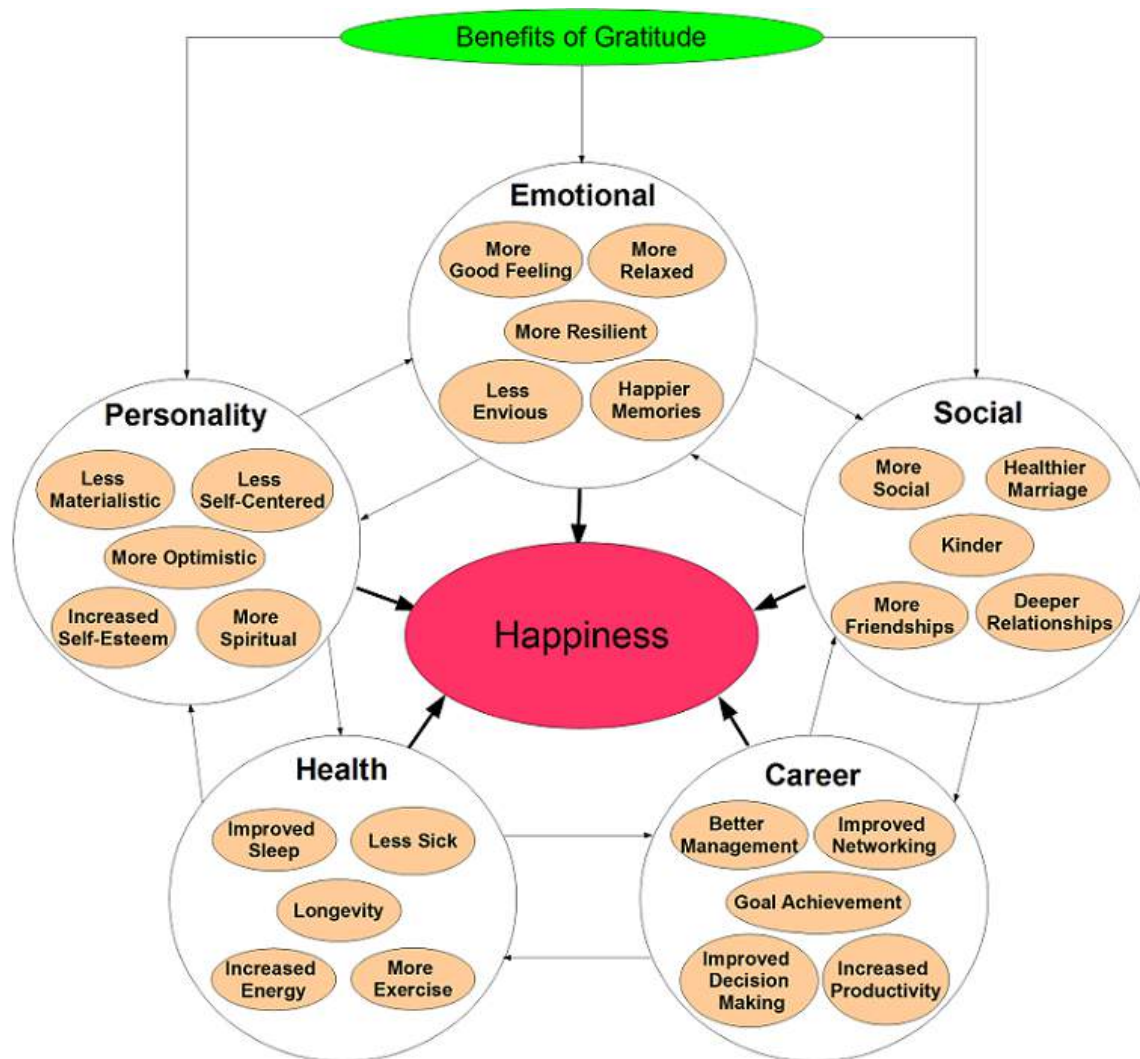
Millennials who do not have enough ego strength or experienced bad life before, tend to have more mental problems than the Gen-Xers or the Baby Boomers. It can be shown as stress, depression, borderline personality, emotional problems, or suicidal tendencies. They might probably suffer more unmentioned mental health problems. But many of them now are familiar with the terms of psychological counseling. So they will come by themselves to seek help from the professionals. One of the effective ways to make them overcome their mental health problems gradually is by reminding them how to be grateful for what they are or what they have.

The definition of gratitude. Burton (2014) explained that gratitude derives from the Latin: “*gratia*”, which, depending on the context, translates as “grace”, “graciousness”, or “gratefulness”. It then makes all derivatives of this Latin root, “have to do with kindness, generousness, gifts, the beauty of giving and receiving, or getting something for nothing.” Earlier, Emmons, McCullough, and Tsang (2002) wrote that gratitude had been viewed variously as a social and civic virtue, a motivator of benevolence, and both a cognitive and emotional reminder of the social need to reciprocate.

Gratitude may also be defined as the appreciation of one's ability, or of a climate in which such successful work was possible (Wood, Froh, & Geraghty, 2010). Gratitude has always been a positive value. Gratitude can be characterized as both a moral and actively pro-social, emotive, concept, the expression of which has potential implications for life satisfaction and wellbeing (Meade, 2016). Within the field of gratitude research, there is a lack of agreement about the nature of the construct. Gratitude is an emotion that occurs after people receive aid, which is perceived as costly, valuable, and altruistic (Wood, Maltby, Stewart, Linley, & Joseph, 2008).

The benefits of gratitude. Gratitude always produces a positive emotion. Gratitude is very important because it serves a purpose (Ackerman, 2019). It also encourages us not only to appreciate gifts but to repay them (or pay them forward). The Greater Good Science Centre (2013) wrote one of the sociologists, Georg Simmel called it “the moral memory of mankind.” Gratitude is a powerful tool for increasing well-being in all sorts of settings, it is not just an action.

The benefits of practicing gratitude are also not tied to any sort of specific pathology. Gratitude is also in line with the values of positive psychology research. Some of the most exciting things of all these benefits of gratitude is that gratitude is practiced at no cost and that anyone can easily be grateful for many things in their lives. There are many ways to practice gratitude, and it can be practiced in any setting of daily life.



**Figure. 1. The Benefits of Gratitude (Source: Happierhuman.com, 2019)**

Components of Gratitude. Gratitude has two key components: a) it is an affirmation of goodness. We affirm that there are good things in the world, gifts, and benefits we've received, and b) we recognize that the sources of this goodness are outside of ourselves. We acknowledge that other people—or even higher powers, gave us many gifts, big and small, to help us achieve the goodness in our lives. Emmons and other researchers see the social dimension as being especially important to gratitude as a relationship-strengthening emotion because it requires us to see how we've been supported and affirmed by other people (GGSC, 2019).

Purpose of the study. This study aims at finding the reasons why millennials prone to have mental problems and how gratitude has an effect on helping them overcome the problems.

## **METHODS**

Participants. The participants in this study were 6 young adults, who reported having mental health problems, such as feeling restless, mood swings, aggressiveness, low self-esteem, or had (a) suicidal attempts, according to some psychological evaluations. They appeared to be quite well when they first came for the session. The age of the participants ranged from 24 to 30

years old. All of the participants had been through 4-6 sessions; each session was about 1.5 to 2 hours length, for about 2-3 months.

The method for collecting data. The method used in this study was the qualitative method, with the phenomenological study. In-depth interview and observation are applied as its tool in collecting data. Data was gathered gradually in some sessions to get more and more data and to find the justification of their problems, as well as the progress of their mental health after practicing the gratitude-related activities. Observations were made along with the sessions, including physical gestures and also attitudes during the sessions.

Procedures. The participants were scheduled for data collecting sessions and counseling sessions with the researcher. During the data collecting sessions, the researcher focused on the observations, and after that, the researcher did the in-depth interviews with the help of the list of questions. They filled in some forms, consist of individual data and some questions about daily activities and other questions about their daily surroundings and some positive and negative experiences. Then they can choose one of the gratitude related activities that they feel like to do. The researcher gave them some examples, such as drawing, writing short stories about anything, writing journals, quotes on colorful memos, etc. When they were instructed to choose, they usually chose one of these and confused what to write on it or draw. But they kept trying, and they could make something better and better each session.

## RESULTS

All the participants reported having problems in mental health in the first sessions. Six participants were analyzed, two males and four females, aged 24 to 30. They came for 4-6 sessions. Each session was about 1.5 to 2 hours length. They reported to have fear, anxiety, mood swings, and also attempted suicide. After some sessions, they feel better and better. First, they had to fill in some forms about their identity and other information about their daily activities. And then, they had to answer some questions about their psychological symptoms checklist. Based on their answers, the researcher did in-depth interviews and observations. Other family members who accompanied them were also interviewed to get more information.

**Table 1. Background of participant**

Reasons	Number of participants
Parents divorce	3 out of 6
Abusive parents/family	4 out of 6
Juvenile delinquency	2 out of 6
Failure in education/work	3 out of 6
Good achievement	4 out of 6
Bullying	4 out of 6
Social media related	6 out of 6

Problems were found related to their mental health. The problems that they faced most were low self-esteem. Almost all participants reported having low self-esteem. They felt that everything went wrong in their hands. They could not handle anything well. Mistakes were made again and again. They gave up easily because they were afraid that they would make more and more mistakes.

Other problems were they always feel restless. Many thoughts roared in their head. Routine activities, presentation they have to make, sales target, all the deadlines, and many other personal matters, e.g., family, love, friendship. The many thoughts caused mood swings too. Sometimes they became aggressive.

Some other problems that they had were psychosomatic complaints, such as headache, vomiting for no reason, stomach ache, or dizziness. Some of them also reported having intense perspiration, mouth dryness, and skin problems.

**Table 2. Mental health problems**

Mental health problems	Number of participants
Restless and aggressive	3 out of 6
Restless without being aggressive	3 out of 6
Mood swings	3 out of 6
Low self-esteem	5 out of 6
Body dissatisfaction	4 out of 6
Psychosomatic complaints	2 out of 6
Suicide attempt	3 out of 6

The participants were encouraged to do some gratitude-related activities. They did gratitude journal writing, finding meaning in quotes, listening to music, and drawing. The result was they feel that it helped them to see things more positively. When they feel the positive, many problems can be faced, although sometimes they still could not find the best solutions.

**Table 3. Kinds of gratitude-related activities that participants like most**

Participants	Gender	Gratitude-related activities
Participant 1	Female	Writing journals, quotes, listening to music
Participant 2	Male	Writing journals, quotes, drawing, listening to music
Participant 3	Male	Drawing, listening to music
Participant 4	Female	Writing journals, quotes, listening to music
Participant 5	Female	Writing journals, quotes, listening to music
Participant 6	Female	Writing journals, quotes, listening to music

**Table 4. Improvement based on the results and comments from the participants**

Participants	Results	Comments
Participant 1	Positive improvement	Enjoy the sessions, helps me a lot, really want to continue writing journals
Participant 2	Positive improvement	Feel better, but still confused about what to do next
Participant 3	Positive improvement	Good overall will try to catch up all the loss
Participant 4	Positive improvement	Really enjoy all the sessions, sometimes still feel sad and depressed, but now I know a little how to overcome it slowly, need patience
Participant 5	Positive improvement	This is good for me, but I don't know how to handle everything without you helping me in sessions like this
Participant 6	Positive improvement	Life is more beautiful. I think I will never attempt any suicide more

## DISCUSSION

People tend to look at the negative side of life experiences. When things went wrong, they blamed others or situations, instead of looking inside whether they played the wrong parts too. Family problems play a role in building Millennials with problems. Thomas Curran, from the University of Bath and Andrew Hill, of York St. John University, did research and found out that the Millennials feel overburdened with a perfectionist streak unknown to their parents or grandparents (Perry, 2018). Environment, such as school environment, work environment, friends, and society, also take part in Millennial's problem sources. Social media make this

even worse (Shout Out UK, 2018). They compared their appearance or lives with others, and become more stressed after finding out that more people seem to have better lives than them. The truth is, people can change our lives if people really want to.

Gratitude is just a simple thing to do, yet not many do it in daily lives. Some people do not think this is important to show gratitude for what they have or to someone that gives help to them. If this gratitude can be practiced every day and routinely, their lives will change. Research shows that grateful people are higher in positive emotions and life satisfaction and also lower in negative emotions such as depression, anxiety, and envy (Emmons, McCullough, and Tsang, 2002).

Millennials are those who reported having more mental health problems compared to generations before them. Research also found that these mental health problems can be lessened by expressing gratitude. Gratitude can be expressed in many ways. It can be expressed in words, drawings, songs, quotes, and many other things. The improvement and comments in this research showed how participants enjoyed the gratitude expressions and gained benefits from the activities. Taking a glance at Figure 1., The Benefits of Gratitude, there is a hope that every participant of this ongoing research can gain all those benefits, but this still has to take some time to observe and conclude (Happierhuman.com, 2019).

## CONCLUSIONS

All participants showed positive improvement after some sessions. They also reported that they could enjoy the activities. Positive comments also came out from their own testimonies. So, the gratitude expression can be used to help Millennials with their mental health problems. Sometimes maybe the results can be seen in a short time, sometimes it takes a longer time to be seen.

Of course, there are some more ways to practice expressing gratitude besides all the ways that have been stated in the above text: always think in positive ways, focus on what we have instead of what we do not have, say thanks in everything we get, count our everyday blessings even if we feel that it is just a small blessing. This research starts from a small step also and hopefully. The upcoming researches will end up in a giant step.

## REFERENCES

- Ackerman, C. E. (2019). What is Gratitude, and Why Is It So Important?. Retrieved from: <https://positivepsychology.com/gratitude-appreciation/>
- Allen, S. (2018). The Science of Gratitude. Greater Good Science Centre. Berkeley: John Templeton Foundation.
- Brandt, A. (2018). Science Proves That Gratitude Is Key to Well-Being. Retrieved from <https://www.psychologytoday.com/intl/blog/mindful-anger/201807/science-proves-gratitude-is-key-well-being>
- Burton, N. (2014). The Psychology of Gratitude. Retrieved from: <https://www.psychologytoday.com/us/blog/hidden-and-seek/201409/the-psychology-gratitude>
- Chowdhury, M. R. (2019). The Neuroscience of Gratitude and How It Affects Anxiety dan Grief (Incl. Exercises). Retrieved from <https://positivepsychologyprogram.com/gratitude-appreciation/>
- Emmons, R. A, McCullough, M. E., & Tsang, J. (2002). Counting Blessings Versus Burdens: An Experimental Investigation of Gratitude and Subjective Well-Being in Daily Life.

- Journal of Personality and Social Psychology.84(2), 377-389.  
<http://dx.doi.org/10.1037/0022-3514.84.2.377>.
- Happierhuman (2019). 31 Benefits of gratitude: the ultimate science-backed guide. Retrieved from: <https://www.happierhuman.com/benefits-of-gratitude/#c13>
- Hoyt, A. & McGrath, J. (2018). How the Millennial Generation Works. Retrieved from <https://people.howstuffworks.com/culture-traditions/generation-gaps/millennials-generation1.htm>.
- GGSC (2019). What is Gratitude? Retrieved from <https://greatergood.berkeley.edu/topic/gratitude/definition>
- McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The Grateful Disposition: A Conceptual and Empirical Topography. *Journal of Personality and Social Psychology*, 82(1), 112-127. <http://dx.doi.org/10.1037/0022-3514.82.1.112>
- Meade, C. (2016). Gratitude and Positive Psychology: What is Gratitude and What are the Benefits of Gratitude? Retrieved from: [positivepsychology.org.uk/gratitude/](http://positivepsychology.org.uk/gratitude/)
- Perry, P. (2018). Millennials are at higher risk for mental health issues. This may be why. Retrieved from: <https://bigthink.com/philip-perry/millennials-are-at-higher-risk-for-mental-health-issues-this-may-be-why>
- Putri, F. I. (2018). Studi: Millennial Beresiko Tinggi Gangguan Kesehatan Jiwa, Ini Sebabnya. Diunduh dari: <https://health.detik.com/berita-detikhealth/d-3851849/studi-millennial-beresiko-tinggi-gangguan-kesehatan-jiwa-ini-sebabnya>
- Shout Out UK (2018). Why Are Millennials So Prone to Mental Health Disorders? Retrieved from: <https://www.shoutoutuk.org/2018/05/01/why-are-millennials-so-prone-to-mental-health-disorders/>
- The Greater Good Science Centre. (2013). What is gratitude? Retrieved from: <http://www.dailygood.org/story/512/what-is-gratitude-/>
- Wood, A. M., Froh, J. J., & Geraghty, A. W. A. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review*. <http://dx.doi.org/10.1016/j.cpr.2010.03.005>.
- Wood, A. M., Maltby, J., Stewart, N., Joseph, P. A. (2008). A Social–Cognitive Model of Trait and State Levels of Gratitude. Retrieved from: [https://greatergood.berkeley.edu/images/application\\_uploads/WoodTraitAndStateLevelsGratitude.pdf](https://greatergood.berkeley.edu/images/application_uploads/WoodTraitAndStateLevelsGratitude.pdf)



# Impacts of Contextual Teaching and Learning towards Student's Social Network (Study on Faculty of Psychology Students of University X)

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## Abstract

One of the learning models in contextual teaching and learning, which combines the study materials with a real-life situation. This research utilizes the contextual learning process as an intervening method for participants of the Early Childhood Education Psychology module. The before and after interventions were examined by using friendship and lecture network patterns. The result exhibits differences in the before and after intervention network patterns. We can conclude that contextual learning has produced the expected outcome. Besides that, contextual learning also caused students to get a deeper understanding of the subject.

**Keywords:** *Contextual learning and teaching, friendship network pattern*

## INTRODUCTION

Within the education world, the learning process is not only in the school setting. A student can learn from their family, school, and society. Someone can be said going through the learning process if there is a changing behavior that can be observed and stayed for a relatively long time. In reality, the teacher must realize that there is no silver bullet learning model. As a result, the teacher must understand various learning models that can be implemented in the teaching process. Some of those models are 1) cooperative learning, 2) contextual teaching and learning, 3) problem-based learning, and 4) team games tournament (Fathurrohman, 2015). Contextual learning emphasizes the full process to get the study materials, then connecting them with the real-life situation. This situation forces students to implement what they learn into their life (Sanjaya, 2009). This learning model also helps students to be more productive in society, sharpen their problem-solving capability, and social skills (Palmiotto, 2003).

Friends, as part of the social environment, can be found surrounding the place where someone does his or her activities. For teenagers (17-19 years old), friends can be located in their school. Shaffer (1994) explained the role of friends to teenagers as follows: a) friends as a social enforcer, b) friends as a behavioral model, c) friends as an object in social comparison, and d) friends as a critic and agent to convince the members. During a lecture, students are consequently involved in various interactions based on the exchanged information. It also happens during the interaction between students. One of the objectives of contextual learning is to improve social skills. Therefore, it is hoped that the model will influence the students' social network patterns.

The research focuses on 1) How effective is contextual teaching and learning on the Early Childhood Education Psychology module?, 2) How different is the student's interaction network on before and after joining contextual learning program?

### *Contextual Teaching and Learning*

Students may experience difficulties in understanding a certain concept with the usual way of teaching (in the example, through teacher's teaching in the class). However, they really need an understanding of the subject when it comes to a real-life situation. The contextual learning and teaching theory noted that the learning process happens when students process information or new knowledge through the ways that can be understood by themselves (through their memory, response, and experience). Their thinking finds the meaning of the concept in a certain context naturally, by looking at the connection between the logical and useful concept and context (CORD, 2001).

According to Fathurrohman (2015), contextual learning and teaching focuses on student activism of which they do and experience by themselves, not only watching and taking notes. Besides that, through this model, students' social skills will be improved. Contextual learning and teaching allow students to have the first experience of the real world. They will feel the benefit of the study materials, motivation to keep studying, solid thinking, and conducive learning process. Meanwhile, contextual learning and teaching assist teachers to connect study materials with the actual problems. Besides that, this model adds potential social issues that students will face outside the school system into the study process. When the students are ready with others, then they will be able to do it within a group with their friends.

There are seven indicators of contextual learning and teaching, according to Fathurrohman (2015): 1) modeling, 2) questioning, 3) learning community, 4) inquiry, 5) constructivism, 6) reflection, dan 7) authentic assessment. Johnson (2007) divides contextual learning and teaching into eight components, such as: making meaningful connections, doing useful works, doing independent learning, cooperation, creative and critical thinking, helping an individual to grow and develop, reaching the high standard, making an authentic evaluation. The last element asks students to use academic knowledge into the real-world context to gain a more meaningful objective.

In this research, the contextual learning and teaching method was applied to the Early Childhood Education (ECE) Psychology module. In the first six meetings, students were given materials related to childhood development, ECE teacher, ECE curriculum, ECE learning environment, materials related to education instruments, and materials related to storytelling for ECE students. Furthermore, students were asked to see the teaching and learning process directly at ECE. Prior to going to the field, those students received observation and interview guidance, which contains the study materials. Then they were asked to compare the concept and the real implementation. Besides that, to benefit the ECE, students also apply the education tools (APE) making materials for ECE. They made the APE and gave them to the ECE. In addition, students did storytelling activities at ECE, after they understand the technique of storytelling for toddlers. It is hoped that these actions will allow students to understand early childhood education psychology, can find the exact issues of ECE that they visited, and can socialize with ECE members, both parents, and the ECE leadership.

### *Social Network*

According to Stanely and Faust (1994), the social network is a social structure that consists of a set of actors, a couple of dyadic relations, and other interactions between the actors. The actors here refer to people who are involved in an environment or a certain condition. Dyadic relation is a relation between two actors. Moreover, the form of network pattern, according to Burt (1992), will determine the social benefit to its members. It means someone will gain benefits because of his or her position within the social network. The situation occurs due to contacts within the network give some information, opportunities, and perspectives that can

give someone a core role within the network. In general, the social network is characterized as a group of which its members are connected very well. Information within the group is most likely homogenous. Other general information is obtained through contact with others. Both will only be connected if there are members who own special positions (for example, bridge).

The ideal social network, according to Burt (1992), is a network that has a connection between different groups. The group is people with something in common. In general, a group consists of people with the same interests or characteristics and periodically doing similar things. Some mentioned the size of a group is at least half a dozen. Others said two people (dyad) could be seen as a group (Baumeister & Bushman, 2014). Marvin Shaw (1981) noted that there is a character within a group, which is all the members are interacting. As a result, Shaw defined group as two persons or more interacting and influence each other. A group consists of two or more interact in a relatively long time, influencing each other in certain ways (Myers, 2010).

According to Myers (2010), in Social Psychology, there is a concept of 'need to belong'. It refers to the human need for building a relationship with others. This need is the biggest portion of human life. Moreover, Myers argued that satisfaction in 'need to belong' related to two other human needs, which are autonomy and competency. Myers also believed another element of happiness is 'feeling connected'. But, according to Roger and Kincaid (1981), someone can't build a relationship with everyone. In general, the relation will only be formed between an individual with certain people, while others not. There are a lot of factors that caused it. One of them is personality. Rogers (quoted by Hjelle & Zieger, 1981) said, if someone accepts himself, he or she will also do the same to others. Supratiknya (1995) also echoed the argument, the bigger someone's acceptance, the bigger the acceptance to others. It will ease preserving and deepening relations with others.

## **METHODS**

This research employs an experiment on a group (one group pretest-posttest design). The participants of this research are all Faculty of Psychology students 2017/2018 academic year who took the ECE Psychology (Psikologi PAUD) module. The research setting is the University X Faculty of Psychology. The measured variables are students' social networks based on friendship and relations that formed due to study. The sample consists of 55 students, 18-20 age years old.

Data gathering was done through the two-parts questionnaire. The first part contains the participants' identities. The other part consists of choices of participants' friendship relations and when they discuss issues about the lecture. According to Myers (2010), in Social Psychology, there is a concept of 'need to belong'. It refers to the human need for building relationships with others. Participants were asked to choose the maximum of three names of other listed students. Those names were included in the questionnaire form.

Data gathering was also done by comparing the result of before the lecture with contextual learning and teaching as a pretest and the aftermath as a posttest, but this is not a statistical test. The treatment of this research experiment was implemented by giving a task to students (five people per group) to visit ECE for doing observation and interviews there, making education tools for ECE students, and do storytelling in the ECE. The analysis of the network pattern of these students was done through sociogram and connection level.

## **RESULTS**

Based on the tested network pattern to the students, the author opts for two topics: interaction between friends and interaction in the lecture. The analysis of these two issues is done through

sociogram patterns, which are based on the matrix calculation. Matrix 1 reflects the number of relations that occurred from one member of a group that chose other members. The matrixes are connected with the sociogram in sequence, for example, matrix 1 with sociogram 1 and matrix 2 with sociogram 2.

### Sociogram 1

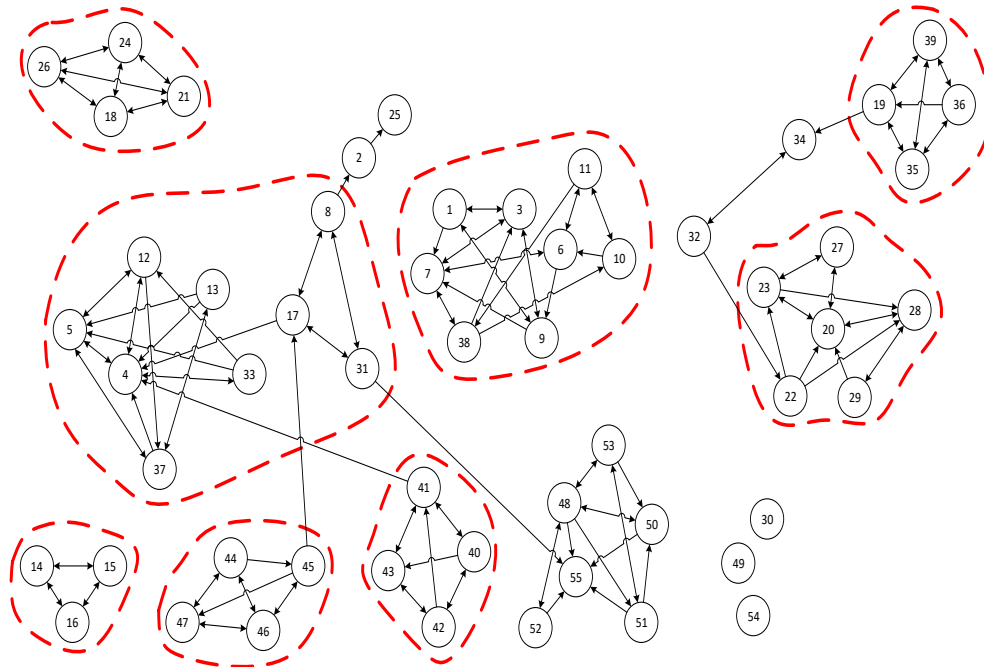


Figure. 1. Friendship (Before Intervention)

### Sociogram 2

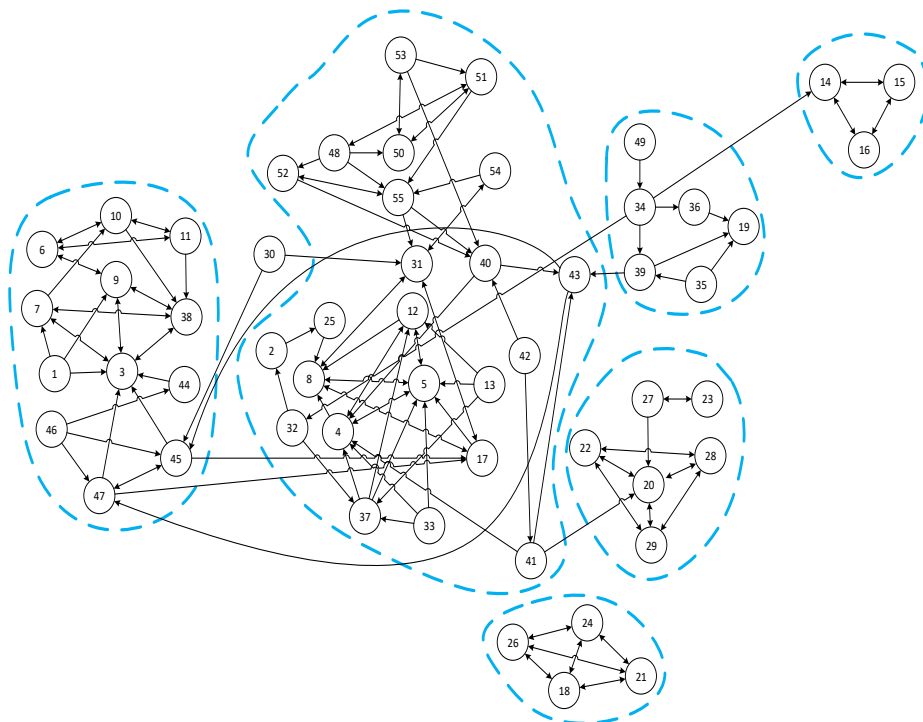


Figure. 2. Friendship (After Intervention)

### Sociogram 3

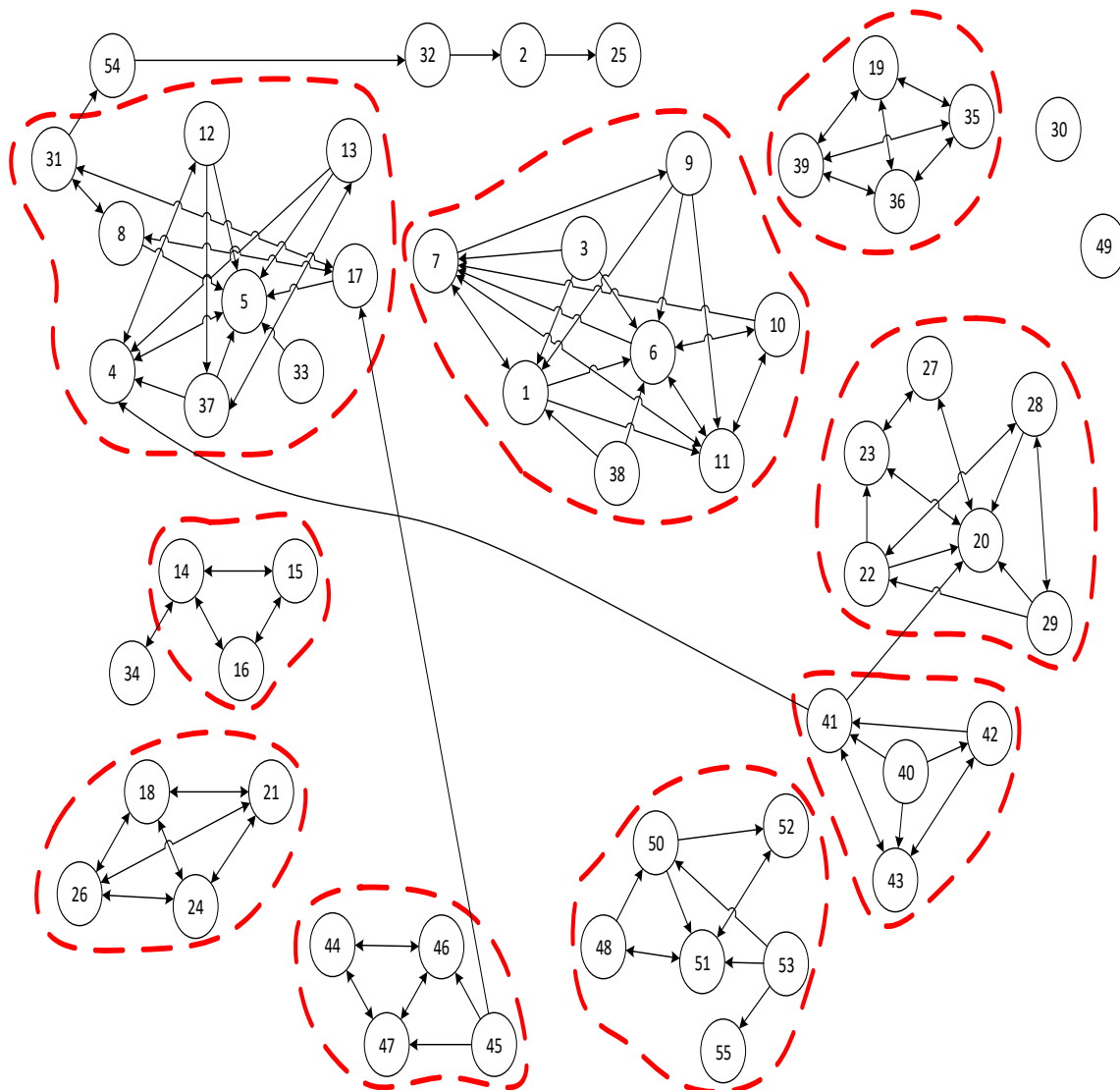
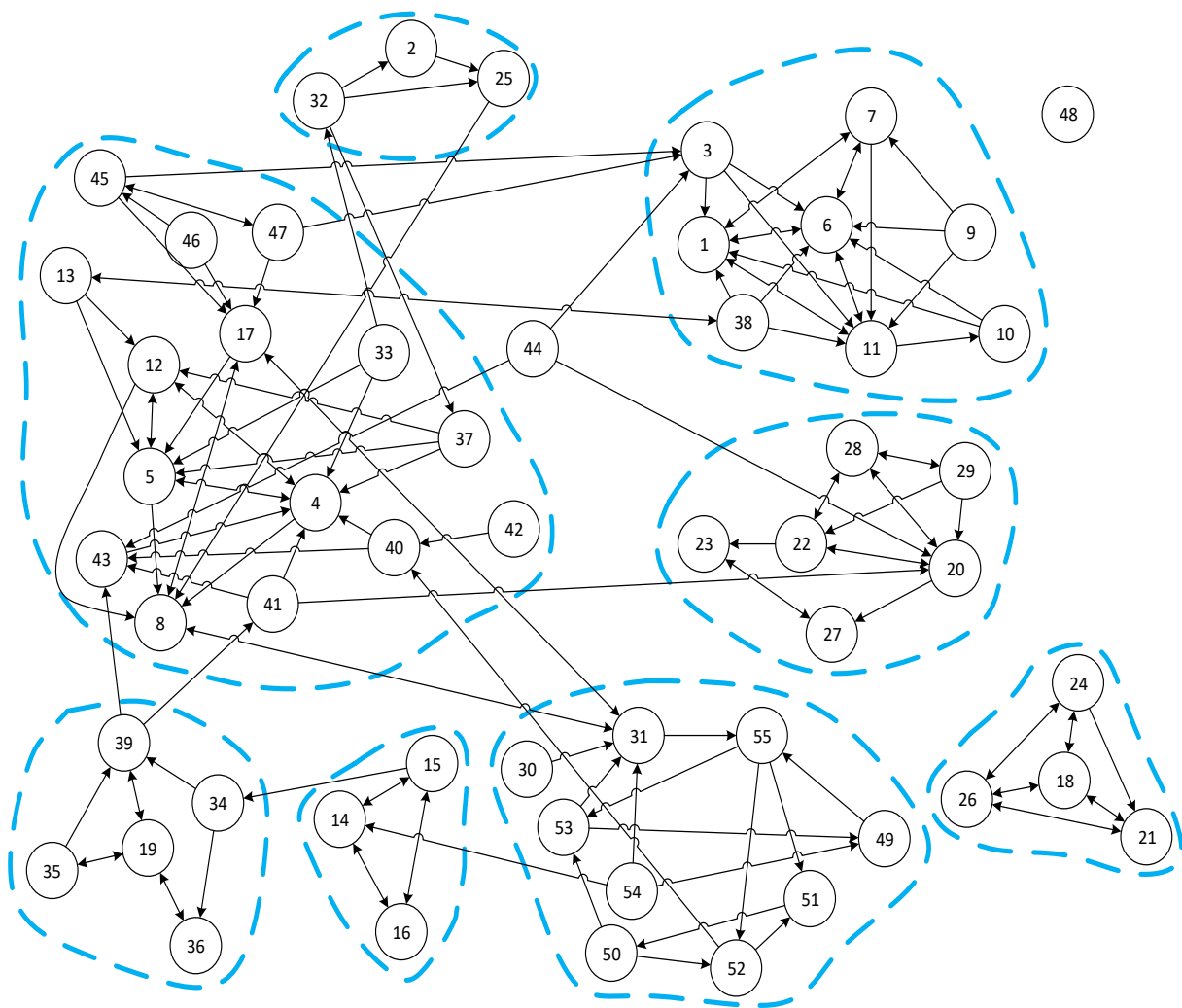


Figure. 3. Lecture (Before Intervention)

## Sociogram 4



**Figure. 4. Lecture (After Intervention)**

The interaction network pattern listed in Table 1 is extracted from sociogram 1 until sociogram 4. The number of cliques on the between friends' interaction network pattern before the intervention was 9 cliques. After the intervention, it became 6. The decrease also occurred in the lecture network pattern of which the number of cliques was reduced from 9 to 8 after the intervention. By looking at the number of these cliques, we can conclude that the intervention is relatively successful because there is a decrease in cliques, which indicates the relationship between student's works.

The clique connector is an individual that becomes a bridge from two cliques. This individual can be said as a 'special' person because he or she is accepted into two cliques. Besides that, the existence of a connector causes clique to become not exclusive. In this situation, the number of clique connector is improving after the intervention. On the relation between friends before the intervention, there were six people. After the intervention, the number became 11 persons. Even the lecture network the number aroused four times, from five to 22 persons after the intervention.

Opinion leader is an individual who is picked up by five or more than five members within a group. Opinion leader is a special individual since he or she can be a source of information for those who chose him or her. Therefore, it would be better if there are many opinion leaders in every group. Table 1 displays the number of opinion leaders in between friends' networks, in which there were five opinion leaders before the intervention and seven after the intervention. In the lecture network, there were six opinion leaders before the intervention and nine after the intervention.

Meanwhile, isolate is an individual who is not included in one of the formed cliques. This isolate is an individual who is not opted by group members when asked about friends and lectures. This type of individual is not a popular person and might not be socializing with his or her peers. In a class that always has tasks and study groups, the isolated individual can be said 'not good' because he did not connect to others. From the network pattern, we can see the number of the isolate was decreasing after getting intervention. In between friends' pattern, there were three isolates before the intervention and none after the intervention. Meanwhile, in the lecture network pattern, there were two isolates students before the intervention and only one after the intervention.

**Table 1. Interaction Pattern Before and After Intervention**

No	Indicator	Before Intervention		After Intervention	
		Friends	Lecture	Friend	Lecture
1	Clique number	9	9	6	8
2	Click Connector	6	5	11	22
3	Opinion leader*)	5	6	7	9
4	Isolate	3	2	0	1

Information: \*) chosen by five persons or more

Table 2 contains between friends network pattern before and after intervention. The table shows individuals who became click connector as bridge are the same individuals before and after individuals. Those people are number 17, 32, 34, 41 and 45. Opinion leaders on between friends network before and after intervention are individual number 4 and 5. These individuals can be used for the purpose of between friends relation process. An individual who requires a special attention is probably number 30, before intervention was an isolate, after intervention can be a liaison.

**Table 2. Between Friends Network Pattern Before and After Intervention**

Details		Before Intervention	After Intervention
Clique Amount		9	6
Isolate Click		3	1
Clique Connector	Bridge	6 (17, 45, 4, 41, 31, 55)	10 (45, 47, 17, 41, 20, 43, 39, 14, 32, 34)
	Liaison	2 (32, 34)	1 (30)
Opinion Leader		5 (5, 4, 7, 20, 55)	7 (3, 38, 8, 4, 17, 5, 31)
Isolate (Individual)		3 (30, 49, 54)	0

Information: number inside the bracket refers to respondent number

Table 3 contains lecture network pattern before and after intervention. As mentioned before, the number of clique connector has been increased when before intervention and after intervention. Individuals who act as click connector, both before and after intervention, are number 17, 20, 41, and 45. Meanwhile, individuals who act as opinion leader are number 4, 5, 6, 11, and 20 with the same position before and after intervention.

**Table 3. Lecture Network Pattern Before and After Intervention**

Details		Before Intervention	After Intervention
Clique Number		9	8
Isolate Click		5	1
Clique Connector	Bridge	5 (4, 41, 17, 45, 20)	21 (43, 39, 41, 34, 15, 14, 54, 8, 31, 40, 52, 17, 20, 13, 38, 47, 3, 45, 32, 33, 25)
	Liaison	0	1 (44)
Opinion Leader		6 (5, 4, 7, 6, 11, 20)	9 (5, 4, 8, 17, 1, 6, 11, 20, 31)
Isolate (Individual)		2 (30, 49)	1 (48)

*Information: number inside the bracket refers to respondent number*

Contextual learning and teaching method that used as an intervention in this research shows a positive result. The success is seen from the increasing social skills amongst respondents in each group, improving cooperation as well as the appearance of individuals who act as opinion leader and click connector. Besides that, contextual learning and teacher also can help students to get deeper understanding of the subject, because they can apply the knowledge on their daily life and contribute to the environment.

## DISCUSSION

This research utilizes one class as a base for those network patterns. The network patterns are divided into lecture and friendship. Table 2 and Table 3 display the details of the network patterns before and after intervention. There are nine cliques and five separated cliques in the before intervention column. After the intervention, the number of cliques became eight and only one separated clique. This condition shows contextual learning and teaching produces a fruitful outcome. As argued by Vygotsky (in Santrock, 2011), teacher should create opportunities for students to gain knowledge together with the teacher and friends. Friends became a paramount part in someone's life, friends become part of social environment and help someone to be involved in social activities (Rakhmat, 2000).

From the research, we can see that between friends and lecture network patterns experienced a transformation before and after intervention. The transformation is deemed positive as it helps students to develop and socialize better. As argued by Fathurrohman (2015), contextual learning and teaching emphasizes on students' activities whereby students do and experience themselves, not only watching and taking note. Besides that, through this learning model, social skills of the students will be enhanced. Social skills of this research respondents have been shown signs of improvement with the increasing number of opinion leader and the abolishment of isolate. As a result, the method is successful.

The decrease of clique number after intervention also supports the success of contextual learning and teaching model. The result of this research supports findings from Palmiotto (2003)



that the model helps students to be more productive in the society, increase problem solving capabilities, and social skills. One of the examples of social activities is to exchange information on lecture as shown by Table 3.

## CONCLUSIONS

Based on the data processing through between friends and lecture matrix and sociogram, we can see that all network groups are not integrated, each of them has clique. Despite having some cliques, there is a clique connector between them. Intervention through contextual learning and teaching managed to integrate those cliques. The clique number is reduced on the between friends and lecture network patterns.

Opinion leader (who is information messenger and someone to ask) exists in each network. Paying attention to the increasing number of opinion leader after intervention, we can say that socialization as part of contextual learning and teaching is successful. The increasing number of opinion leader appears at between friends and lecture network patterns. Students supposedly are connected to one another, especially in doing lecture tasks through study group. This research reveals some students are isolate, they were not chosen or did not choose friend and when communicate about lecture. Those isolates existed in between friends and lecture network pattern before intervention. After intervention, the number of isolates was decreased, even the between friendship network pattern did not have isolate after intervention.

Contextual learning and teaching method that used as an intervention in this research shows a positive result. The success is seen from the increasing social skills amongst respondents in each group, improving cooperation as well as the appearance of individuals who act as opinion leader and click connector. Besides that, contextual learning and teacher also can help students to get deeper understanding of the subject, because they can apply the knowledge on their daily life and contribute to the environment.

This research is a continuation of the two previous studies. Based on the result, we need to pay attention to certain type of students in those networks. Therefore, next studies may explore these elements: 1) qualitative research with student participants who became opinion leaders, clique connector and isolate, 2) same research for other modules to find network patterns which might show characteristics of big city, 3) make a program for academic advisor lecturers, to give special treatment to students who need it, 4) implementing the contextual learning and teaching method to other classes. Faculty can monitor to students who require social attention to prevent risk of drop out. Besides that, we need to think about the information and the way to deliver it by looking who can be utilized as the source.

## REFERENCES

- Baumeister, R.F., & Bushman, B.J. (2014). *Social psychology and human nature* (3rd ed.). New York: Wadsworth, Cengage Learning
- Burt, R. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press
- Burt, R. (2004). "Structural Holes and Good Ideas". *American Journal of Sociology*. 110: 349–399.
- aCORD. (2001). *Contextual Learning Resource*. <http://www.cord.org>
- Effendi (1993). *Ilmu, teori dan filsafat komunikasi*. Bandung: Cipta Aditya Bakti.

- Fathurrohman. (2015). Model-model pembelajaran. Diunduh dari <http://staffnew.uny.ac.id/upload/132313272/pengabdian/model-model-pembelajaran.pdf>
- Gunarsa & Gunarsa (2009). Psikologi remaja. Jakarta: Gunung Mulia
- Hjelle, L.A. & Ziegler, D.J. (1981). Personality theories: Basic assumptions, research and application (2nd editon). Singapore: McGraw-Hill Book Co.
- Johnson, E.B. (2007). Contextual teaching and learning: menjadikan kegiatan belajar mengajar mengasyikkan dan bermakna. Bandung: Mizan Learning Center
- Muijs, D & Reynolds, D (2011). Effective teaching: Evidence and practice. London: Sage.
- Myers, D.G. (2010). Social psychology (10th edition). Boston: McGraw-Hill.
- Ormrod, J.E. (2009). Psikologi pendidikan: Membantu siswa tumbuh dan berkembang. (Edisi Keenam. Jilid 2). Jakarta: Erlangga.
- Palmiotto. (2003). Contextual Teaching and Learning. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.564.3563&rep=rep1&type=pdf>
- Rakhmat (2000). Psikologi komunikasi. Bandung: Remaja Rosdakarya Offset.
- Rogers, E.M. & Kincaid, D. (1981). Communication network, toward a new paradigm for research. New York: The Free Press.
- Sanjaya, W. (2009). Pembelajaran Berorientasi Standar Proses Pendidikan. Jakarta: Kencana
- Santrock, J.W. (2011). Educational Psychology. (5th ed). NY: McGraw Hill.
- Schunk, D.H. (2014). Learning theories an educational perspective. (6th ed). USA: Pearson.
- Shaffer, D.R. (1994) Social and personality development (3rd ed). California: Broks
- Stanley, W. & Faust, K. (1994). "Social Network Analysis in the Social and Behavioral Sciences". Social Network Analysis: Methods and Applications. Cambridge University Press. pp. 1–27.
- Supratiknya, A. (1995). Komunikasi antarpribadi tinjauan psikologis. Yogyakarta: Kanisius
- Soderstrom, S.B. Social Psychology of Networks: Influence of Emotion on Perception of Personal and Professional Networks, <https://www.kellogg.northwestern.edu/research/ktag/images/KJOB05%20Sara%20Soderstrom.pdf>
- Wasserman, S. & Faust, K. (1999). Social network analysis: Methods and applications. New York: Cambridge University Press.

# The Effectiveness Realistic Mathematics Education Using Recitation Methods and Token Economy to Increase Student Mathematical Literacy

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## Abstract

Based on the results of preliminary research measuring the mathematical literacy skills of students in Aek Natas Satu Atap Junior Secondary School in 2018/2019, from 122 students, there were 12 students in the high category, 23 students in the medium category and 87 students in the low category. To overcome these problems, research on the application of realistic mathematical approaches (RME) is assisted by recitation methods and economic tokens as an effort to improve students' mathematical literacy abilities. The method used is a quasy experiment by using the pre-test design post-test design. The sample used in this study were students of SMP Negeri 3 Satu Atap Kec. Aek Natas, Kab. Labuhanbatu Utara, North Sumatra, with 30 students. The data collection tool uses mathematical literacy questions from PISA (Program for International Student Assessment) with 15 questions. From the results of the implementation of the study obtained the results of 30 students who have the ability of mathematical literacy students in the high category of 11 students, there are 13 students, and low there are 6 students. Based on the results of the t-test obtained a significance value of 0.000, it concluded that the implementation of learning using a realistic mathematical approach aided by recitation methods and economic tokens is effective in increasing students' mathematical literacy abilities.

**Keywords:** *Mathematical Literacy, Realistic Mathematical Education (RME), Token Economy*

## INTRODUCTION

The low quality of education can be seen from the Programme for International Student Assessment (PISA) in 2015. Indonesian ranking Mathematics, Skills 63, from 70 countries (OECD, 2016). At PISA 2012 then, the ranking of mathematical abilities was 64 of 65. The average score for PISA 2015 and 2012 is mathematics score 386 (lowest value 375). From the results of the PISA report for the year 2015, Indonesia is positioned at the rank of 64 of 65 countries with a score of 386 from the lowest score is 375. It proves students' mathematical skills are generally very low. In fact, every aspect of human life has the connectedness with the branches of mathematics both in complex life and to solve simple problems.

One way to achieve these mathematical objectives is to improve the students' mathematical literacy skills. Ojose, reveals that someone who has mathematical literacy skills will be able to make an estimate, interpret the data, solve the problems of the day, can show the conclusion of a problem in the form of graphs And geometry, and can communicate mathematics. Mathematical literacy is a knowledge to know and use the mathematical basis of good

mathematical literacy skills to have the sensitivity of which mathematical concepts are relevant to the phenomenon or problem encountered.

According to the Programme for International Student Assessment (PISA) (Anisah et al., 2011:1), in 2003 a study conducted by the Programme for International Student Assessment (PISA) focusing on reviewing student literacy skills in a country demonstrates That Indonesia's achievement in the order of 36 from 41 countries. In 2006, junior high school scores on mathematics were based on the number 391 (scale 0-800), but the average score was 500. And the latest PISA results in 2009 announced early December 2010 increasingly concern where Indonesia returns to the rank 61 of the 65 countries with an average value of only 371. The year 2011 puts Indonesia in the 36 positions of 40 countries. In 2015 the results showed that Indonesian students had not demonstrated satisfactory achievement. The mathematics ability of Indonesian students, only able to rank 45 from 50 countries, with achievement score 397 and still below the international average score of 500.

Low student literacy skills also occur at SMP 3 Satu Atap Aek Natas. It is seen from the preliminary research results in the 3 one-stop-state SMP Aek Natas by sharing reading interest and mathematical literacy skills tests. From 122 students from the VII class to the IX class of the 2018/2019 school year, the following results are obtained:

**Table. 1 sharing reading interest and mathematical literacy skills tests result**

No	Category	Total Student who Received
1	high	12
2	half	23
3	low	87
Total		122

In addition to test students ' mathematical literacy skills, researchers also conduct interviews, observations and see the documentation that teachers and schools have inferred that:

1. This low student's mathematical ability is seen from the repeated results and the low student mathematics exams gained from the mathematics teacher's documentation.
2. Low Student Mathematics literacy skills: the ability of low student mathematics literacy is seen from the results of preliminary research conducted by the proposal is generally seen students are only able to work on the problems that are not in the form of stories. For example, students are only able to work on  $4 \times 5 - 6$ . Still, if the problem is replaced in the form of the story, students can not analyze the problem and make mathematical problems that are told to be a mathematical language, or to make conclusions from the question read Students. Students cannot create what is known, be asked from a question in the form of a story.
3. Teachers of mathematical subjects who still have not varied teaching activities in the classroom: mathematical literacy relates to "real" problems, where problems usually arise in a situation. Students must be able to solve real-world problems that require students to use the skills and competencies that have been gained through school experience and daily experience. So it takes learning using methods related to everyday and realistic problems.

From the above results are obtained in general students who have low mathematical literacy skills will also have a keen interest in mathematics books. It is supported by interviews with school principals and mathematics teachers. According to the school principals, the schools have implemented a culture of literacy, yet mathematical literacy is still lacking in attention.

So also, mathematics teachers have already applied just not to make conclusions so that students' literacy skills are not measured the limit of their ability. From this, it is understandable why students at SMP Negeri 3 Satu Atap have low mathematical skills, and mathematics teachers feel it difficult to hang up students when explaining the material.

Based on the problem above, the solution provided to improve students' mathematical literacy skills is to conduct learning activities with a realistic mathematical approach. It is because mathematical literacy is related to the "real" problem. It means that the issue usually occurs in a situation. In conclusion, students should be able to solve real problems (real word problems) that require them to use the skills and competencies that they have gained through experience in school and every day. Thus the proper learning method is PMR (realistic mathematical approach). In the learning activities with this realistic mathematical approach is done by assisted recitation methods and economic tokens. Which according to Djamarah and Zain (2006 in Suparti, 2014) mentions the method of Recitation is a method of presenting the material in which the teacher gives a certain task so that the students do the learning activity. The method of recitation is used when the mathematics literacy material is completed by using the material approach. The students are given assignments to work on the tasks contained in the exercise book and the homework book that in the study This is called the book "Self Control". During the implementation of learning activities to increase students' interest in learning activities and working on exercises to improve student mathematics literacy, the principle of one of behavior modification methods is used by the token Economy. The economic token technique is a technique that emphasizes the awarding of awards aimed at motivating students to behave as expected. Purwanta (2015:148) explains that "the economy token is one of the techniques in behavioral modification using a single piece (or one sign, one cue) as soon as possible each time after the target behavior arises". These tokens are collected, and then within a certain period can be redeemed for gifts or something that has meaning. In short, the economy token is a reinforcement for managed and altered behaviors. One can accept reinforcement to increase or decrease the desired behavior. In the implementation of technical research on economic tokens given if the students successfully perform the task of working on the problem of mathematical literacy or training tasks given, then students will get a star. All students are required to collect the earned stars and can be redeemed for the prizes offered after the mathematical learning activities with the realistic mathematical approach of the assisted Recitation method and the token method Economy for 18 sessions.

Based on the explanation is expected by implementing realistic mathematical approach students will be able to understand mathematical literacy through the daily problems they face, in addition to the assisted Recitation method then students will Always repeat the lesson through the tasks provided and with the method of the student's economic tokens will always be eager and motivated to follow the learning activities and exercises given. The study aims to describe the effectiveness of realistic mathematical approaches with assisted recitation methods and economic tokens in improving the ability of mathematics literacy students.

## **METHODS**

### *Research Approaches*

In this study, the approach used is quantitative, with the research design is quasi-experiment. To find out whether the treatment results are effective or not, then a pretest is given before the treatment, and the posttest is given after the treatment, then were compared.

**Table 2. Design Research**

Pretest	treatment	Posttest
O <sub>1</sub>	X	O <sub>2</sub>

### *Population and Sample Research*

The population in this study were all students in SMP Negeri 3 Satu Atap Aek Natas North Labuhanbatu Regency in the 2019/2020 school years. The total population is  $\pm 132$  students. The sampling technique is to use a purposive sampling technique. The sample criteria used are: 1) has the highest grade in the class but has a low mathematical literacy ability, 2) the age of students 15 years to 15 years 11 months. Based on these criteria, the number of samples obtained is 30 students obtained from students who are ranked 1 to 10 in each class for classes VIII and IX in the 2019/2020 school years. This sampling technique is based on the results of an agreement with the headmasters of the large number of students who have low mathematical literacy skills, but researchers have limited time and place to carry out research.

### *Instruments Research*

Instruments research is to use a mathematics literacy ability test prepared by researchers based on a collection of mathematical literacy questions issued by PISA (Defantri, 2017). The number of questions used was 15 questions, which were given to students during the pre-test and post-test. The pre-test was given before the implementation of learning with PMR using recitation methods and the economy tokens. In contrast, Postes were given after the learning activities were completed. The implementation of the lesson was 18 times.

### *Analysis Technique*

#### *Descriptive Analysis*

The presentation of descriptive analysis is to see a descriptive of the level of students' mathematical literacy skills at the pre-test and post-test, as well as a comparison of students' mathematical literacy skills when viewed based on the minimum value and maximum value. The following table will explain the categorizing of students' mathematical literacy skills into 3 categories of high, medium, and low category. The formula used is  $(\text{Score Maximum} - \text{Score Minimum}) / \text{categories}$ . The student will score 6.67 for each answer to the correct question, so score a maximum  $15 \times 6.67 = 100.5$  and score a minimum  $1 \times 6.67 = 6.67$ . According to the existing formula then the range of scores is obtained as follows:  $(100.5 - 6.67) / 3 = 93.83 / 3 = 31.28$

**Table 2. Range of Score**

No	Categories	Range Score
1	High	69.23 - 100
2	Half	37.95 – 69.22
3	Low	6.67 – 37.94

#### *Test Normality*

The normality test is used Kolmogorov Smirnov test, which is calculated by looking at the probability or significance value  $> 0.05$ . This test is done as a prerequisite test to test the hypothesis in this study.

## Hypothesis test

To test hypotheses in this study using paired test sample t-test. The T-test is used if the data are normally distributed, but if the data is not normally distributed, then the analysis continued using Mann Withney test. Assuming if the t-test analysis is smaller than t table, then  $H_0$  is accepted, and  $H_1$  is rejected. But on the contrary, if t-test analysis is greater than t-table, then  $H_0$  is rejected, and  $H_1$  is accepted with significance ( $\text{sig} < 0.05$ ).

## RESULTS

### Describe the Learning Activity of Implementation

The learning activities carried out for approximately 3 weeks, carried out on Monday to Saturday from 10:00 to 12:30 WIB, where learning activities are carried out with a realistic mathematical educations approach assisted by recitation methods and token economy methods. Implementation of the activities carried out for 18 lessons before the treatment is given the first pretest after treatment is done then carried out posttests. When learning is given adjusted to the indicators of mathematical literacy, namely 1) mathematical thinking and reasoning, 2) mathematical argumentation, 3) mathematical communication, 4) modeling, 5) problem solving, 6) representation, 7) symbols, 8) tools. The schedule of learning activities is divided into 1) 10 minutes, in the beginning, is the announcement of the number of tokens (stars) obtained by students, 2) 30 minutes discussing questions that have been done in the book "practice book", 3) 15 minutes students are asked to read the material, 4) 15 minutes working on the task in the "practice book", 5) 1 hour 15 minutes is the implementation of learning with RME, 6) the last 5 minutes, announcements about the assignments to be done by students at home contained in the book "self-control".

Implementation of learning with RME the first time the mentor provides material following the indicators to be achieved, then proceed with inviting students to work on the questions arranged by the mentor based on the conditions that exist in the school environment, for example in the row material and the sequence of students asked to look for solving problems about counting the number asbestos is needed by a handyman based on the number of classes to be built. After finishing working on the problem, students are asked to give an argument from the results of solving the questions that have been given. During the discussion of questions, students are invited to discuss, to provide an assessment of whether the arguments given by their friends are true or false. At the end of the RME implementation, the mentor provides additional material to justify the other arguments or indicators following the learning objectives.

In learning activities, researchers also apply the recitation method of giving assignments, where students work on tasks arranged by researchers. Students who can complete the task will get a "star" (a token economy) that students will collect by sticking "stars" on the sheet work. At the end of learning after 18x lessons, all the "star" tokens collected by students will be exchanged for prizes that have been prepared by researchers and students before learning activities begin. The prize tokens given are school supplies or student needs that do not exceed Rp. 50,000 and students who can collect up to 100 stars will have the opportunity to visit the city of "Medan" (Capital of the Province), and students in general never come to visit the city of "Medan".

## Analysis of Descriptive

**Table 4. Results Calculation of descriptive analysis of students' mathematical literacy abilities**

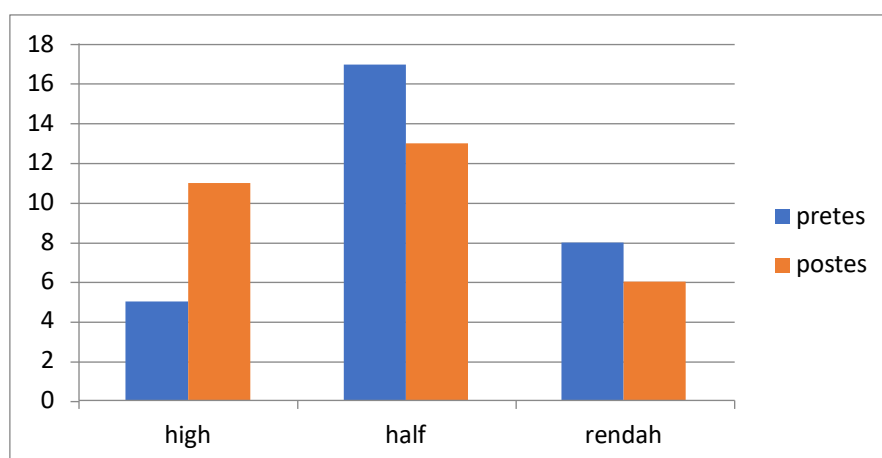
No		Pretest	Posttest
1	N	30	30
2	Mean	12.4447	57.9997
3	Standard Deviasi	13.53066	20.50370
4	Minimum	0.00	20.00
5	Maximum	46,67	86.67

In table 4 can be seen that there is a difference in the difference between the mean pretest and mean posttest, namely pretest 12.44 and posttest 57.99, for the mean difference of 12.44 so that it is concluded that there is an increase in students' mathematical literacy ability before receiving treatment and after receiving treatment activities with realistic mathematical approaches assisted by recitation method and economic token.

**Table 5. Describe comparative mathematical literacy students at pretest and posttest**

No	categories	Range Score	Pretest	Postes
1	high	69.23 - 100	5	11
2	half	37.95 – 69.22	17	13
3	low	6.67 – 37.94	8	6
<b>Student</b>			30	30

For an illustration in the form of a bar chart shown below:



**Figure. 1. Pretest and post test result**

Based on the results, it was obtained that at the time of pretests, the ability of students mathematics literacy in the high category. There are only 5 students in the category of 17 students. In the low category, there are 8 students. However, after following the mathematical learning activities using the realistic mathematical approaches assisted by the method of recitation and the method of economic tokens obtained, there is an increase in the mathematics literacy skills of students. The students have high mathematical literacy capability. There are 11 students, and who are in the category of 13 students and who still have low mathematical



literacy skills, there are 6 students. From the results of interviews and direct observation with 6 students, the inability of students because students are still low in the basic concepts of mathematics and the ability to work on problems. Almost all students can answer up to 3 problems that initially, students were not at all able to work on the questions of mathematical literacy.

### Normality test

The results of the normality test of the mathematical literacy score are described in table 5.

**Table 5. Results normality test**

class	Kolmogorov Smirnov (sig.)	conclusion
Pretes	0.062	Normal
Postes	0.605	Normal

The table above shows that the significance value  $> 0.05$ , then the data in this study are normally distributed. Thus the hypothesis test used in this study is the paired sample t-test.

### Hypothesis Test

To test whether the hypothesis in this study is accepted or not using the parametric statistical method Paired Sample T-Test, because this test is used to see whether there is an effect of a treatment seen from the pretest and posttest values. The results of the test output are as follows:

Paired Samples t-test Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Posttest	57,9997	30	20,50370	3,74345
	Pretest	12,4447	30	13,53066	2,47035

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% CID				
					Low	Upper			
Pair 1	Posttest Pretest	-45,55500	20,49745	3,74230	37,90113	53,20887	12,173	29	,000

In the pretest, the average score of the mathematical literacy ability of students is 12.45. Meanwhile, in the post-test of the average score of mathematical literacy is 57.99. It indicates there was a difference between pre-test and post-test, which shows the increase in students' mathematical literacy ability before and after treatment.

From the output above, the value of sig. (2 tailed) of  $0,000 < 0.05$  because of the value of sig.  $0.000 < 0.05$ . The implementation of the realistic mathematical approach using recitation methods and economic tokens is effective in increasing students' mathematical literacy abilities.

The value of the t-test (12,173) > t-table (1.70) which proves that there is an effect of learning with a realistic mathematical approach assisted with recitation methods and economic tokens on the mathematical literacy ability of students in SMP Negeri 3 Satu Atap Aek Natas, Labuhanbatu Utara Regency, North Sumatera Province. Overall, using realistic mathematical approaches with recitation methods and economic tokens can improve students' mathematical literacy skills.

## **DISCUSSION**

Many studies that prove realistic mathematical education approaches (RME) are approaches that can improve students' mathematical abilities such as communication skills, concept comprehension skills, and others (Brigitta Misgi Larasaty et al., 2017; Rustial Marta, 2018; Invany Idris, 2016). Since students' interest in learning and reading in mathematics is very low, this approach is combined with the recitation method and the token economic method. It is expected that using the recitation method makes students more accustomed to working on mathematical literacy problems, and using the token economy method makes students motivated and interested in participating in the whole process of learning activities. It's just a weakness of the economic token method during the implementation of learning where some students are cheating when doing assignments at home by asking others to do it. Hence, researchers only provide advice and psychoeducation so that students are not focused on gaining stars but are more focused on increasing competence. Researchers should be expected to be able to minimize the effect of the token economy on cheating in reaching tokens. In the recitation method, because students are given almost everyday assignments such as working on problems and summarizing the material to make many students complain of fatigue and bored with routines. To overcome this, the researcher gives a "star" for students who can make a summary properly. However, at first, it will get stars only who can work on the problem. But overall, using a realistic mathematical approach aided by recitation methods and token economics can improve students' mathematical literacy abilities.

## **CONCLUSIONS**

This section describes the direct results of the findings of research that have been done. Based on this, the implications obtained from the results of this study are as follows: 1) the improvement of students' mathematical literacy skills using the RME approach aided by recitation methods and economic token methods, 2) the determination of prizes from economic tokens is based on the results of agreements with students so that students are more motivated to learn, 3) before learning to improve mathematical literacy skills, students should have good prior knowledge and understanding of mathematical concepts. Students have low initial knowledge, and understanding of concepts is more difficult to improve their mathematical literacy abilities.

Based on the results of research and discussion that has been presented, the conclusion that to improve mathematical literacy skills, one of the alternatives that can be used is to use a realistic mathematical approach but also during learning activities assisted by the method of recitation and application of economic token principles. The realistic mathematical approach is used to improve the ability to understand the "real" problems related to mathematical problems. The Recitation method is used so that students are trained to face literacy problems. At the same time, the principle of the economic token is done so that students have the motivation to learn and read the problem in a good way. It is expected that students can solve mathematical literacy problems and form literacy behavior that is reading and listening to readings.

## REFERENCES

- Asmara, Andes Safarandes dan SB Waluya dan Rochmad. 2017. Analisis Kemampuan Literasi Matematika Siswa Kelas X Berdasarkan Kemampuan Matematika. Jurnal :Scholaria, Vol. 7 No.2 Mei 2017; 135-142.
- Fahrudin, Adi. 2012. Teknik Ekonomi Token Dalam Pengubahan Perilaku Klien. Jurnal :Jurnal Informasi Vol. 17 No.03 Tahun 2012.
- Fatmawati, Nurul. 2015. Penerapan Token economy dalam Meningkatkan Disiplin Peserta Didik Kelas Satu di MI AL-Mujahidin Temanggung. Skripsi. Tidak Diterbitkan. Yogyakarta : Program Studi Pendidikan Guru Madrasah Ibtidaiyah Fakultas Ilmu Tarbiyah dan Keguruan Universitas Islam Negeri Sunan Kalijaga.
- Kaisar, Muhammad Izzad. 2017. Pengaruh Persepsi Minat Baca Matematika Terhadap Kemampuan Literasi Matematika Pada Materi Fungsi Komposisi dan Fungsi Invers Pada Siswa Kelas XI di Makassar.
- Khuzaimah. 2017. Efektivitas Penggunaan Teknik Token Ekonomi Terhadap Perilaku Prokrastinasi Akademik Mahasiswa Program Studi Psikologi FKIK Universitas Jambi. Jurnal : Psycho Idea. Tahun 15 No. 1 Februari 2017. ISSN 1693-1076.
- Defantri. 2017. Kumpulan Soal HOTS Model PISA atau TIMSS (Literasi Matematika). Download. (<https://www.defantri.com/2017/05/kumpulan-soal-hots-model-pisa-atau-timss.html>)

# The Development of Expressive Writing Module to Improve Post-Traumatic Growth in Disaster Victims

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## Abstract

This research was designed to make the module of Expressive Writing which aims to increase post-traumatic growth on disaster victims. This was conducted as an intervention effort on disaster victims to recover on the condition after disaster and not too long in collapse condition or stressed out after disaster which can trigger the emergence of another psychological disorder. This Expressive Writing Module was proposed in order to assist disaster victims to explore and express their emotion and thought, until through this way they can recognize themselves. The results of previous research by Harsono et. al. (2019) states that expressive writing is statistically effective in improving the growth after earthquake in Lombok, West Nusa Tenggara. By using qualitative method and research and development, the researcher conducted procedure of data collection through FGD with 10 participants. The research stages were; 1) there were previous module, 2) try out implementation, 3) FGD, 4) Munul new model, 5) Expert opinion, 6) Try out. By using Expressive Writing Module from Hapsari (2012) shows some evaluation which can be adjusted with the condition of natural disaster victims towards duration of time, procedure of implementation, activity, and place of implementation.

**Keywords:** *Module of expressive Writing, Post Traumatic Growth, Disaster Victims*

## INTRODUCTION

The need of psychological intervention for solving mental health problem which occurs long term after disaster is extremely necessary. This is because in the next years The National Board for Disaster Management has predicted that Indonesia will still encounter many natural disasters either in the form of disaster related to the climate or geological ones. This is related to the geological position of Indonesia which is located at Pacific Ring of Fire and it is the meeting point of tectonics plate.

Disaster management in Indonesia nowadays still frequently emphasizes on the physical sector recovery, such as giving assistance in the form of clothes, food, and home. Whereas, beside causing bad loss and physical impact, natural disaster also causes psychological impact which needs adequate attention. This is because the people who experience natural disaster has risk of having physical and mental problem for a long time (Smyth, 2002). This occurs because natural disaster is an event which causes someone lose their wealth suddenly, death of the loved ones, sudden physical disability or other impacts which make someone experience repeated fear about the coming of disaster. Trauma,

depression, and stress are some psychological impacts which are frequently experienced by victims of natural disaster.

As the response towards the need of psychological intervention model after disaster, this research aims to develop an intervention model which can be used in handling mental health after natural disaster. Expressive writing is the model which efficiently can be implemented in the condition of disaster victims because it does not need many tools but it can give positive psychological impact for the users. Expressive writing is one of interventions which has positive impact in handling the mental health after traumatic events. Expressive writing is mentioned as promising intervention for relieving trauma, decrease anxiety, and improve psychological prosperity or physics of someone (Bodor, 2002; Stanton et. al., 2002). In expressive writing activity, someone can release negative thought and feeling related to traumatic events, however expressing these interruptive mind and thought can also cause negative effect on someone. Therefore, this expressive writing intervention must be adjusted with the psychological needs of someone. Expressive writing can heal stress after disaster and increase body autonomous system such as blood pressure and heart beat (Pennebaker et. al., 1998). Besides that, it also can decrease depression symptoms (Nixon and Kling, 2009), increase awareness regulation, self-understanding, coping ability development, and also increase interpersonal relationship (Smyth, 1998).

Expressive writing model developed by the researcher on this opportunity refers to Hapsari (2012) about expressive writing used on domestic violence victims with content elaboration; building rapport which aims to explain the organization and rules during the activity, conducted for about 30 minutes. The next step is Pre Expressive Writing by giving information to the participants about what will be done during the activity. Next is expressive writing session which will last for 30 minutes about the general occurrence which causes negative effect. In the next day, the participants are free to write at any place comfortable for them. It can be at home, or anywhere they want in order to be able to express their thought and feeling. In the next day, the researcher will collect the participants and start identifying the problem and expectation, and then the participants are given chance to tell their traumatic experience orally and ended with giving suggestion and plan for next activity designed by each participant.

The researcher adopted Expressive Writing Model and tested if the model from Hapsari (2012) also effectively can be implemented on the victims of disaster in Lombok. From the result of previous research entitled “The Effectivity of Expressive Writing for Improving Growth After Trauma on The Victims of Earthquake Disaster in Lombok, West Nusa Tenggara” Harsono (2019), was conducted by using experimental approach towards 10 participants with criteria; victims of natural disaster, adults, male and female, can read and write, show that expressive writing approach effectively can improve the growth after trauma for victims of earthquake disaster in Lombok, Sig.  $P=0,013$  ( $p>0,05$ ) by using Wilcoxon test. However, although it is said effective statistically, in fact there are some condition of the disaster victims which can be used to make the module perfect especially for the victims of natural disaster.

Post traumatic growth itself can be understood as the process of positive changes on someone who ever experienced traumatic occurrence (Tedeschi & Calhoun, 1996). According to Werdel & Wicks (2012), post traumatic growth is the result of individual persistence in facing stress and trauma in real life after traumatic event. Post traumatic growth according to Tedeschi and Calhoun (2004) consists of five aspects; they are increased relationship with other people, personal power improvement, possibility identification or new opportunity, positive spiritual changes, and improvement and appreciating life.

## METHODS

The research method used in this research was qualitative approach. In simple way, qualitative method is the research method which means to understand the phenomenon about what has been experienced by the research subjects. This can cover the behavior, perception, and motivation through description (Moleong, 2005). Besides that, the model of this research used research and development. This research model was used to make existing product perfect and adjusted with the context in line with the users. In this case, what we developed is expressive writing intervention developed by Hapsari (2012). Expressive writing intervention would be adjusted with the characteristics of psycho-social context which occurs on natural disaster survivor. These are the procedures of implementation in this method; 1) Previous module, 2) Try-out implementation, 3) FGD, 4) New module appears, 5) Expert opinion, and 6) Try-out.

In this research, only initial try out implementation stage and FGD were conducted, while the next stages such as team work with the experts and try out of new module will be continued in the next research. At FGD stage, the participants would be given some questions to discuss related to the implementation of expressive writing session which has been conducted beforehand. The participants were categorized into three groups of discussion and each is guided by one facilitator. The question given to the participant is the question also adopted from the previous module until it had been through initial verification. The questions were related to how was the feeling and mind of the participants after expressive writing.

### *Location and Participants*

Expressive writing activity and FGD were conducted in 3 days in Kekalik Jaya Village, Mataram City, West Nusa Tenggara. The participants that we involved in this research were the survivors of natural disaster which occurred in Lombok, West Nusa Tenggara. The reason of selecting our participants such as because West Nusa Tenggara province since July 2018 were shaken up by hundreds of earthquake either in small scale or big scale. The participants in this research were 10 people consisting of eight women and two men experiencing earthquake occurrence directly.

In this research, the researcher and the participants worked together to find out the new model in line with the characteristics of condition they face, what problem being faced during following the session of expressive writing and assists the researcher to reflect the activity in this research.

**Table 1.** Expressive Writing Module

Day	Session	Time	Activities	Purposes
1	I	±30 minutes	<i>BUILDING RAPORT</i> 1. Introduction 2. Explanation on the purpose of the activity	<ul style="list-style-type: none"> <li>• To create good relationship and trust each other between the researcher and participants and also among the participants.</li> <li>• Participants obtain information about the purpose and process of the research.</li> <li>• Participants know their rights during the research process.</li> </ul>
	II	±30 minutes	PRE EXPRESSIVE WRITING 1. Explanation about expressive writing 2. Explanation on how to fill in	<ul style="list-style-type: none"> <li>• Participants know about expressive writing.</li> <li>• Participants understand how to fill in daily sheets.</li> </ul>

			the daily sheet. 3. Question and Answer	<ul style="list-style-type: none"> <li>• Participants obtain sufficient information about the activity that will be conducted.</li> </ul>
III	±30 minutes	EXPRESSIVE WRITING SESSION		<ul style="list-style-type: none"> <li>• Participants tell and describe the traumatic occurrence or what causes negative effect which he/she experienced through writing media.</li> </ul>
2	IV	Flexible	EXPRESSIVE WRITING SESSION (conducted at home/residence of each participant adjusting with their daily activities)	<ul style="list-style-type: none"> <li>• Participants tell and describe the traumatic occurrence or what causes negative effect that they experienced through writing media.</li> </ul>
3	V	±30 minutes	IDENTIFICATION OF PROBLEM AND EXPECTATION: 1. Review of the previous meeting. 2. Recognize the subjects problem. 3. Recognize subjects' expectation from expressive writing	<ul style="list-style-type: none"> <li>• Know the problem of subjects in previous writing session</li> <li>• Participants tell what they expect after two times doing expressive writing session.</li> </ul>
	VI	±60 minutes	SESSION OF TELLING EXPRESSIVE WRITING	<ul style="list-style-type: none"> <li>• Participants are given opportunity to tell the traumatic experience or what causes negative effect which they experienced orally</li> </ul>
	VII	±30 minutes	CLOSING: 1. Giving suggestions from participants about expressive writing session 2. The researcher closes whole expressive writing and say thank you to the participants.	<ul style="list-style-type: none"> <li>• Participants give suggestion for the implementation of expressive writing in another time.</li> </ul>

*Source: Hapsari (2012)*

Some things that became the study in arranging this expressive writing module were: 1) Instruction, 2) The correlation between therapist and clients, 3) Intervention time, 4) Intervention materials.

## RESULTS

Expressive writing activity that had been conducted on the victims of earthquake in Lombok, West Nusa Tenggara obtains some results related to the activity implementation as follows:

1. Evaluation towards the duration. The time given for expressive writing implementation is felt too long and monotonous by the participants, as stated by H (40 years old) "Tired of writing, need rest...", and also stated by A (38 years old) during the process of FGD

“It is better to give break time”, until the module needs to be given rest alternative or ice breaking as long as it does not decrease and change the core activities.

2. Procedure of implementation, some participants state that they need time to think before writing it. Until the participants asked for a couple of time to find ideas and built the communication with themselves.
3. Activity, some participants admitted that by writing in the room provided by the researcher, they could express themselves when doing expressive writing. This is because the participants are saved from external interruption such as noisiness. However, some participants admit that by writing at home and also doing daily activities, this enables them to do expressive writing. They admit that at home and at closed room help them to be think deeper about their mind and feeling. Until conducting it in two different places still possible to be done on disaster victims.
4. Evaluation of place of implementation, the place used was not proper because the location was impacted by the disaster. However, it will be better if the committee prepares the possibility if the participants take their children with them. Until this needs to be taken care of so that the activity can be conducted in accordance with the procedures and the plan. If the participants are allowed to take their children with them, then the committee needs to provide special playground for children close to the where the activity takes place.
5. All participants admit that through expressive writing, it really helps them to be more relaxed. This is because the participants can express all pressures in their mind and feeling, beside that they also admit that by writing the things they feel embarrassing and not accepted by the environment can be expressed through expressive writing.

## **DISCUSSION**

The research results by Harsono (2019) related to the effectivity test, expressive writing shows that by writing expressively, it can increase post traumatic growth for disaster victims. Still through module approach from Hapsari (2012), the researcher adopts to be given to different situation. If beforehand expressive writing module was given to domestic survivor, with the same organization it is given to disaster victims and in fact this approach can effectively increase post traumatic growth. As previously explained, that in order to know if disaster victims have increased post traumatic growth after doing expressive writing, it can be known through instrument scale measurement pre and posttest with emerging indicators or increased interpersonal relationship, appears and increased of personal power, capability of identifying the opportunity and possibility after disaster, more positive spiritual change, and also positive nuance in appreciating life (Tadeschi & Calhoun, 2014).

These five indicators are quantitatively tested for its effectivity, and obtains result quantitatively that after disaster they admit to be closer with other people surround them. In the beginning they do not have routine activity that they do together, however after disaster occurred, they become more frequently meet and share story. Still in FGD forum, the participants also tell that after disaster they become better in worshipping God and more frequent going to the mosque and reminding each other to pray. Their awareness related to life is the gift from God and God can do anything and anytime which cause them to be more surrender to God. This is then what causes them to be more grateful because they are still given chance to continue life, even almost all participants admit that they are grateful that in their area not as bad as other area impacted by disaster.



The participants admit that when they write about earthquake occurrence, there is physical reaction such as their hand becomes sweaty, narrow chest, body felt under the weather, wanted to cry because they have to recall their memory and what happened during disaster, until sometimes this causes them to stop writing for a moment. When writing at the spot determined by the researcher, they admit that they need some time to relax by closing their eyes, but when these things occur outside the place provided by the researcher, they admit that they will finish the job until finally their feeling is back to neutral and calm. The participants also admit that after they succeed writing what they feel and think related to the disaster makes them more relaxed and can take positive value from the disaster. They admit by writing also make them more relaxed because if they talk to other people, not all of them can accept their feeling and opinion. This is in line with Pennebaker et. al. (1998) who states that expressive writing increases body autonomous system such as blood pressure and heart beat, through expressive writing activity the pressure towards the feeling and thought will decrease.

The time needed by the participants in solving the writing is varied, if conducted in the place provided by the committee, they can keep writing in line with the rules, however they admit that the results obtained probably still do not reflect all mind and feeling. If conducted at home, they admit that they can finish it in a couple of hours, because during the activity they can do housework's or other jobs. However, the results obtained are longer and deeper until this needs evaluation for the researcher to optimize the activity of expressive writing conducted in the location provided. The participants admit that they do not mind assigned writing but they want break time for a moment, this can be utilized by the researcher by giving ice breaking.

## CONCLUSIONS

Effective writing activity is a form of psychological intervention which can help the participants in improving post disaster growth. From the research results, it can be concluded that the module used need to be adjusted with the condition of disaster victims such as the duration of time used adjusted with physical condition and age from participants. Beside that evaluation needs to be given on the condition of implementation by giving space and distance in the room if the participants take their children with them in order to make it more conducive. Giving the participants time to build the framework of ideas to describe more feeling and thought also needed. The research results show that expressive writing effectively help disaster victims to increase post traumatic growth.

## REFERENCES

- The effect of expressive writing towards the symptoms of physical stress after trauma on women victims of household violence. (Thesis not published). Faculty of Psychology, Gadjah Mada University, Yogyakarta.
- Nixon, R. D., & Kling, L. W. (2009). Treatment of Adult Post-Traumatic Stress Disorder Using a Future-Oriented Writing Therapy Approach. *The Cognitive Behaviour Therapist* , 2, 243-255.
- Pennebaker, J. W., & Chung, C. K. (2007). Expressive writing: connections to physical and mental health. Dalam H. S. Friedman, *Oxford handbook of health psychology* (hal. 1-31). New York: Oxford University Press.

- Smyth, J M. Hockemeyer, J R. Tulloch, H. 2010. Expressive writing and post-traumatic stress disorder: Effects on trauma symptoms, mood states, and cortisol reactivity. The British Psychological Society
- Tedeschi, R. G., & Calhoun, L. G. (2004b). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1-18.
- Tedeschi, R. G., & Calhoun, L. G. (2004c). Posttraumatic growth: A new perspective on psychotraumatology. *Psychiatric times*, 21 (4), 58-59.
- Werdel, M, B., & Wicks, R. J. (2012). *Primer on posttraumatic growth: An introduction and guide*. United States of Amerika: John Wiley & Sons Inc.

# Adolescence Opinions Regarding Nationalism in Jakarta

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## Abstract

The study aims to describe adolescence' attitudes toward nationalism. The study group consisted of 102 adolescences in Jakarta, which consisted of 81 females, and 21 males participated in the study. The research used open-ended questions regarding adolescence' attitudes toward nationalism. The data were analyzed using MAXQDA software analysis for developing the thematic coding as well as quantitative frequencies. The results indicate several attitudes of adolescence toward nationalism, including proud to the nation, respect, love of the nation, maintaining unity in diversity, serving nation, protecting nation as well as implementing nation ideology. Loving and serving the nation are two noticeable dimensions of nationalism. In the female group, loving the nation takes the highest frequency, while serving the nation is the highest among the male group.

**Keywords:** *adolescence, nationalism, views, descriptive study*

## INTRODUCTION

Among the problem in providing a good dictionary that reflects the meaning of certain words is a different value of the word within a large community. *Nationalism* and *patriotism* are among the words that have a different interpretation. Although they both have a different meaning, the ideas are connected. In many recent texts, *patriotism* is commonly collocated to words such as *bravery*, *valor*, *duty*, and *devotion*. Meanwhile, *Nationalism* is closely related to movements, such as political movement.

Social-science research on nationalism has tended to focus either on 20th-century European politics or on state-building in the post-colonial era. Ernest Gellner's classic *Nations and Nationalism* (cited in DiMaggio & Bonikowski, 2008).

The definition of *nationalism* in the Western World could be different from Indonesian. It is important to have a good understanding of nationalism based on the history and the social in the perspective of Indonesian. Anderson, K.B. (2016) in his book, *Colonial Encounter in 1850s: The European Impact on India, Indonesia, and China*. During his lifetime, Marx's writings were focused on capitalism in Western society. Though he stated that the rising of the capitalist world "draws all, even the most barbarian, nations into civilization", the non-Western societies such as Russia, India, China, Algeria, and Indonesia possessed social structure marked differently from those of Western Europe. Nationalism in the Western world is something inherited from generation to generation and evolved from capitalism, colonialism, then nationalism, but in some countries continue the kingship. Indonesian nationalism should be viewed through the youth organization in the past, such as Jong Java (Young Java), Indonesia Muda (Young Indonesia), Jong Islamientenbond (League of Young Muslims), Jong Minahasa

(Young Minahasa), and so on. The orientation of these youngsters of those days was a common project for the future to be independent of the three hundred fifty years of Dutch colonialism. These social youth group formed the early organizations that joined the independence movement that later through their representative proclaimed the country like Indonesia. They could work together regardless several historical events that occur between several regions, such as Acehnese kings had once "colonized" the coastal regions of Minangkabau, Buginese kings had enslaved Torajanese people, and that Javanese aristocrats had tried to subjugate the Sunda highlands, or Balinese overlords had successfully conquered the island of Sasak. When people in a certain physical territory begin to feel that they share a common destiny or a common future or, in other words, they feel bound by a deep horizontal comradeship. The rise of nationalism is tied to the visions and hopes for the future of the people. By the vision to be a great nation someday, they build their dreams on three important underlying Indonesian youth pledge, which is One Homeland, one Nation, one Language. The complete pledge of the Indonesian youth is: "First, We, the sons and daughters of Indonesia claiming with one bloodshed, the Indonesia Homeland; Second, We, the sons and daughters of Indonesian claim to be one nation, Indonesian; Third, We the sons and daughters of Indonesian uphold the language of unity, Indonesian" (Zakky, 2018).

When Indonesia was established, the homeland is from Sabang to Merauke across the five big islands (Sumatera, Java, Bali, Sulawesi, and Irian Jaya) and the 17.508 archipelagos. One Nation, Indonesian with the red and white flag, though there are 489 tribes in Indonesia, they all have to learn one language, which is the Indonesian language (Bahasa Indonesia) rooted from the Melayu (Malay) language. The national anthem is "Indonesia Raya". The motto of the Indonesian country is "Bhinneka Tunggal Ika" which means Unity in Diversity. The Indonesian state philosophy is Pancasila derived from Old Javanese Sanskrit words "Panca means Five" and "Sila means Principles". Pancasila is composed of five principles, which are as follows: First, Belief in the One and Only God (in Indonesian "*Ketuhanan Yang Maha Esa*"), Second a just and civilized humanity (in Indonesian "*Kemanusiaan Yang Adil dan Beradab*"), 3. The unity of Indonesia (in Indonesian "*Persatuan Indonesia*"), 4. Democracy, led by the wisdom of the representatives of the people (in Indonesian "*Kerakyatan Yang Dipimpin oleh Hikmat Kebijaksanaan, Dalam Permusyawaratan Perwakilan*"), 5. Social justice for all Indonesians (in Indonesian "*Keadilan Sosial bagi seluruh Rakyat Indonesia*").

According to the social identity and self-categorization theory, its process of cognitive (Westle, 2014). But, nationality is a complex phenomenon. It has a deep psychological construct, which is not easy to be explored. Nationalism has been exposed since childhood, except that in reality, teen nationalism, in particular, seems to be less realized. Young children see national identity, in part, as biological in nature, a perception that diminishes as they get older, finds a new study by psychology researchers.

Adolescence also is venues for education, providing young people with valuable information about such issues as how to handle any situations (e.g., information violence prevention and mental health concerns in many others) (Papalia, Wendkos-Olds., & Duskin-Feldman, 2009). Risk-taking in adolescence is an important way that adolescence shape their identities, try out their new decision-making skills, and develop realistic assessments of themselves, other people, and the world (Ponton, cited in American Psychological Association [APA], 2002). Such exploratory behaviors are natural in adolescence (Hamburg, cited in APA, 2002), and teens need room to experiment and to experience the results of their own decision making in many different situations (Dryfoos, cited in APA, 2002).

The study of young people is essential because they will become the leaders of tomorrow as well as the policymakers. Today our youth generation is the most educated and most engaged

with the world through media and the freedom of using various high technology facilities. The dynamic change of the world and its influence through the media may influence the youth in perceiving nationalism too. In the eyes of its parents and the Indonesian State, a baby born in a natural Indonesian people is an Indonesian, but the baby himself does not yet think this way. The process whereby he will become for himself an Indonesian is a long one. He needs to learn the spirit of being an Indonesian, a committed and culturally Indonesian, and yet there is a chance of failure. According to Anderson, the "continuity" of a nation is fundamentally an open question, and also a kind of wager. The wager is that the idea "the future of Indonesia" will be sufficiently rooted in the spirit of the country's legal citizens that each new candidate-member of the nation will be ready to set aside where necessary personal ambitions and loyalties for that grand idea. Erikson (cited in Papalia, Wendkos-Olds., & Duskin-Feldman, 2009), emphasized that adolescence was a period of identity integration. Therefore, a training ground for youth to cope with many things arise in their lives either in finding the resolution of childhood crises, relationships, the onset of sexual maturation and the possibility of sexual intimacy and the social norms, philosophy of fundamental beliefs as well as the pressures that they experienced in what the society set out for them.

Despite changes in views of nationality, the work suggests the intriguing possibility that the roots of nationalist sentiments are established early in life (Devitt, 2019). Many youths still have a low level of nationalism, such as not memorizing the national anthem and the philosophical foundation of Indonesia. The current study to get a description of youth nationalism, namely the understanding and form of nationalism in daily activities.

Previous research by Schwartz et al. (2012), when developing the measurement of his state identity as an American citizen, it aims, first, if he wants to understand the psychological consequences (such as welfare or difficulties), then he must have a valid and reliable identity measure. Second, because ethnic identity factors and national identity are dimensions related to aspects of collective identity and culture (Spinner-Halev & Theiss-Morse, cited in Schwartz et al., 2012), it is important to ensure that these two types of identification are parallel in structure. Such parallel measurements can be used to investigate the extent to which individuals are bicultural; that is, they are identified simultaneously with other ethnic groups (Berry, Phinney, Sam, & Vedder; Hornsey & Hogg, cited in Schwartz et al., 2012). Like ethnic identity, nationalism is both an individual construction and a collective identification (individuals identifying with a social group (Ashmore, Deaux, & McLaughlin-Volpe; Spinner-Halev & Theiss; Theiss-Morse, cited in Schwartz, 2012). The theoretical model on which most ethnic identity measures are based is a blend of Erikson's, that psychosocial theory, which states that individuals consider various ideas or alternatives before committing to one or more of these, and social identity theory (Spears; Tajfel & Turner, cited in Schwartz, 2012).

Nationalism and perhaps in other terms referring to national identity, is one of the collective identities. This collective identity includes gender identity, religious identity, social class identity, ethnic identity, cultural identity, and national identity, etc. (Smith cited in Tian, 2017). In the current study, to explore the attributes and components of a particular national identity as Tian (2017) had done in China, start with the general concept of national identity, as well as its components, and then apply it as a specific reference to national identity in China. National identity is a multidimensional concept (Schlesinger; Smith; Sasaki quoted in Tian, 2017) which includes structural elements including ethnic, cultural, territorial space, economic, legal and political systems (Sasaki, cited in Tian, 2017), and moreover, certain languages, sentiments, and symbolism (Smith, cited in Tian, 2017).

According to Roberts (2015), throughout the twentieth century, young people were significant agents of social protest leading to social and political transformation in Indonesia. Therefore,

the researchers decide that research on nationalism among the adolescences is an important issue because this group of youngsters psychologically seeking their identity should be guided towards a firm foundation of the country ideology and law.

The formulation of the problem in this study seeks to determine the variation of events experienced by adolescents that can trigger teen nationalism related to self-perception of nationalism. For this reason, the research problem formulation is:

1. What is the picture of nationalism according to adolescence?.
2. What events show the most about the realization of nationalism in everyday life?.

## **METHOD**

The studies aiming to define a situation, which already exists or existed in the past, are studies designed according to the scanning model (Karasar, 2003). In this study, an existing situation was analyzed since the study aims to determine the views of adolescence on nationalism. Therefore, this study is a patterned research designed according to the scanning model. We leveraged theory and evidence to define nationalism operationally, and establish a hypothesized nationalism framework. This research is qualitative survey research that seeks to explain and find variations in research variables in the population studied.

### *Participants*

The study participants' adolescence in DKI Jakarta. Participants are chosen purposively. Based on these criteria, as many as 99 participants consisting of 80 women and 19 men who were in the adolescence stage, and age range of 19 to 21 years were involved in this study. In this study, it is aimed to determine the views of adolescent regarding nationalism. The number of female students participating in the study was 81 (79,4%), and the number of male students participating in the study was 21 (20,6%).

### *Research Instrument*

"Adolescence Views Regarding Nationalism" was developed to determine the views of adolescent nationalism. These forms consist of two open-ended questions to determine their views about nationalism. The open-ended questions on the form provide contextual information and guidance on how to interpret the perspective taken by adolescents regarding nationalism, which can be anonymous or not anonymous, depending on the needs of the researcher/instructor.

### *The Analysis of The Data*

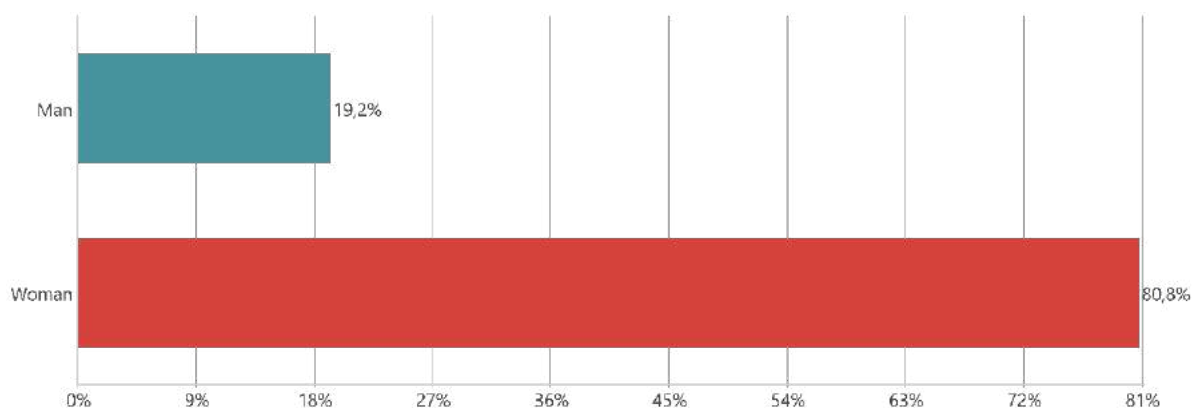
The answers given to the two open-ended questions in the form were combined and gathered under common headings. The analysis used the MAXQDA program for the formation of thematic coding and descriptive statistical delivery. Further analysis by testing the structure of nationalism views by adolescents was using the FACTOR program. This research was conducted from January to March 2019 in Jakarta. Research instruments include informed consent, a measurement scale that is part of the assessment views of adolescents on nationalism.

Data was collected through a questionnaire with two open questions and supplemented with gender and age demographic data. Research questions include: "What is the perception or views of nationalism according to adolescents?, and What events show the most about the realization of nationalism in everyday life?". After all the questionnaires were collected, participants' responses were inputted into the spreadsheet and then read by the MAXQDA program for analysis. The analysis was done by coding the participant's answers. The first step

is to see the frequency of meaningful words that most often appear in all participant responses with the help of WordCloud in the MAXQDA menu. Identification of keywords and meaningful through WordCloud is an open coding process. Data analysis was carried out by analyzing the relationship between patterns of categories/ themes identified from the answers to the questions in the survey. This step is axial coding. After finding thematic themes based on axial coding, the next step is to do selective coding. Selective coding is the process of integrating and filtering categories so that all categories are related to core categories. MAXQDA helps researchers collect, organize, analyze, visualize, and publish research data.

The research participants in this study involved more women (80.8%), than men as can be seen in the following table.

**Figure 1. An Overview of The Study Participants' Demographic Data by Sex**



This section begins with a brief description from the participant's perspective regarding nationalism followed by the manifestation or form of application of nationalism in daily activities. Based on WordCloud detection on the first question, the word "love the homeland" was obtained quite a lot. After that, the analysis is carried out at the sentence level and the context of the event. The response sample from the questions in the form of application of nationalism in everyday life, including "using domestic products", after analysis, coding is categorized into the theme group "love the nation". Participant's response with the statement "participating in defending the country" is coded as "serving the nation". Samples of events with this theme include daring to fight, being pro-state. Participant responses are also excluded by events perceived by the subject as the next theme, namely protecting the nation.

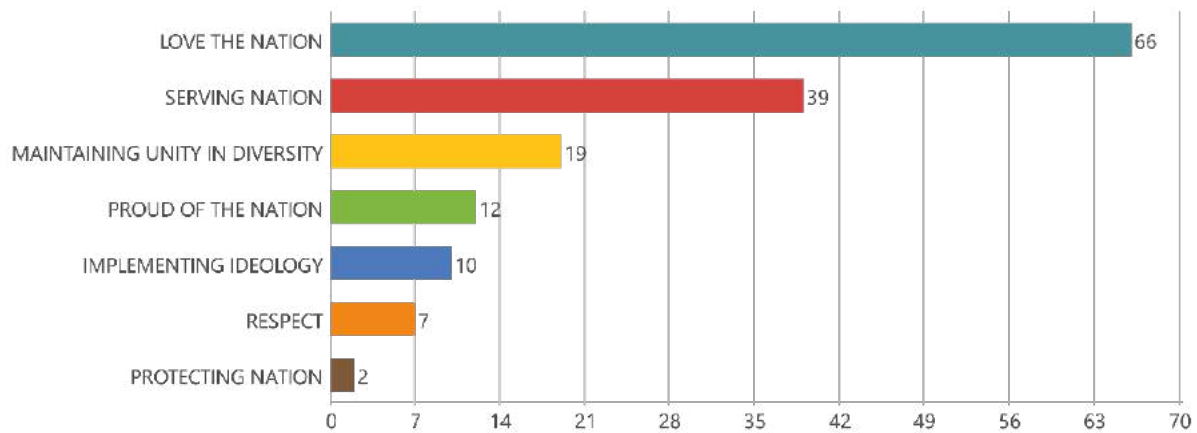
With the help of WordCloud, the keyword "respect" is a concern of researchers who then form the third coding of the so-called "respect". Samples of events with the theme of respect include respecting the differences among people, respecting different cultures and religions. Respect is also excluded by events perceived by the subject as the next theme, namely maintaining unity in diversity. Finally, the participant's response grouped in coding implementing ideology.

Frequencies and percentages calculated. Results regarding adolescent's perception of nationalism find that the opinions of adolescents regarding nationalism included the following: proud to the nation, respect, love of the nation, maintaining unity in diversity, serving nation, protecting the nation as well as implementing nation ideology.

Based on the seven themes of events that gave rise to nationalism in the research subjects, information was obtained that the most perceived nationalism of adolescents was the feeling

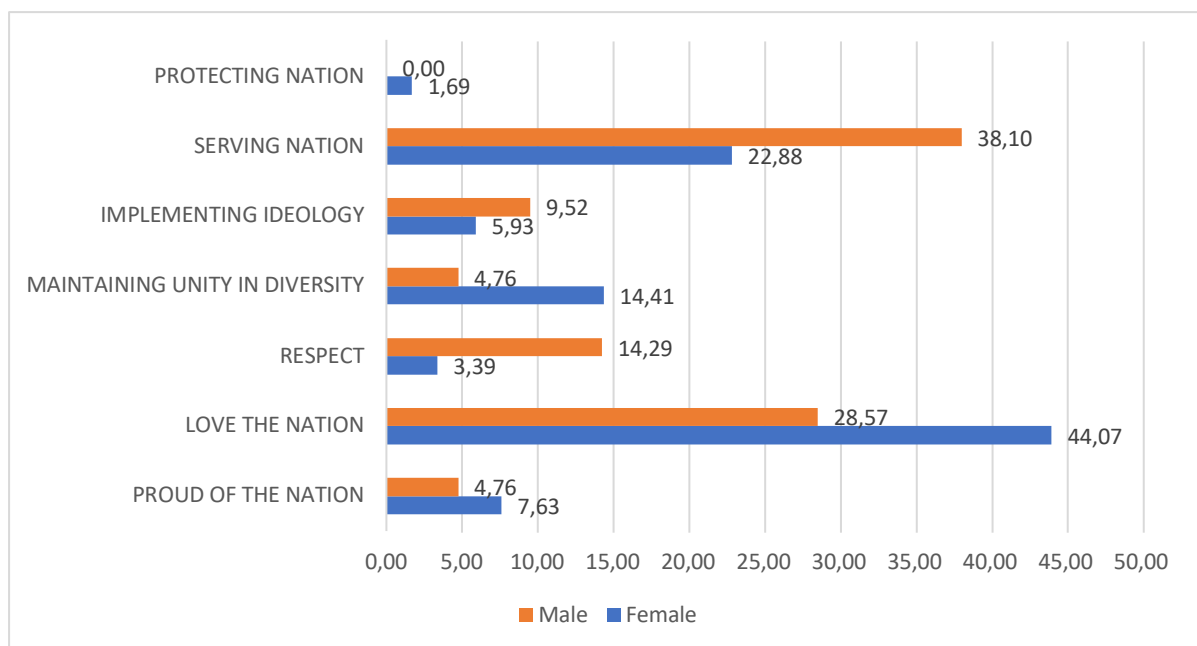
of love for the homeland. The following chart summarizes the frequency of events that describe teenagers' perceptions of the concept of nationalism.

**Figure 2. Distribution of Frequencies of Adolescent Opinions Regarding the Perception of Nationalism**



Next, to facilitate understanding of the embodiment of nationalism in the daily lives of adolescents, in this section begins with a brief description of the perspective of research subjects distinguished by sex. The findings in this study can be seen in the following chart. Loving and serving the nation are two prominent dimensions of nationalism, as expressed by the adolescents. In the female group, loving the nation takes the highest frequency, while within man, serving the nation is the most prominent one.

**Figure 3. Distribution of Percentages of Male and Female Adolescent Opinions Regarding the Meaning of Nationalism**





## DISCUSSION

Previous research has been carried out, namely "The American Identity Measure: Development and Validation across Ethnic Groups and Immigrant Generation", which is designed to validate the size of American identity for use with diverse ethnic groups. American Identity Measures (AIM) was created to adapt the Multi-Group Ethnic Identity Measure (MEIM) to refer to the exploration and confirmation of individual identification from the United States (Schwartz et al., 2012). Meanwhile, in this research is an initial study in examining perspectives on nationalism as part of national identity in adolescence.

From the result of this research, serving the nation are two prominent dimensions of nationalism, as expressed by the adolescence. In the female group, loving the nation takes the highest frequency, while within man, serving the nation is the most prominent one.

The results of this research are in line with previous research from Davidov (2009). Previous research has been carried out, namely "The American Identity Measure: Development and Validation across Ethnic Groups and Immigrant Generation", which is designed to validate the size of American identity for use with diverse ethnic groups. American Identity Measures (AIM) was created to adapt the Multi-Group Ethnic Identity Measure (MEIM) to refer to the exploration and confirmation of individual identification from the United States (Schwartz et al., 2012). Meanwhile, in this research is an initial study in examining perspectives on nationalism as part of national identity in adolescents.

The national identity is considered a central concept of group attachment in the modern world (Davidov, 2009). The national identity reflects different aspects of an individual's relationship toward his or her nation. In general, what it describes is the intensity of feelings and closeness toward one's nation (Blank, Schmidt, & Westle cited in Davidov, 2009). Nationalism is the social construction of legitimate national membership, and the emergence of political movements that use national symbols as rallying points (DiMaggio cited in Bonikowski, 2008).

The result shows adolescents' views on nationalism relate to the concept of love for the state and the act of defending the country. It is following the study of Bonikowski (2008) that nationalism refers to and associated with concepts like patriotism and national pride, which can be classified into three broad approaches: political, psychological, and cultural. The first deals primarily with nationalism at the level of the collectivity and its elites, the second at the level of the individual, and the third at the level of individuals embedded in structures of social relations that pattern the cultural resources to which the individuals have access. These distinctions bear partial resemblance to Calhoun's (cited in Bonikowski, 2008) tripartite typology of nationalism as a political project, an ethical imperative (though Calhoun is less interested in individuals than are political and social psychologists), and a discourse.

### Implications for Theory, Application

Measurement constraints nationalism is worth surmounting, such as the limited number of research samples, demographic settings that can still be explored, and variations in using research methods. However, because research on nationalism may contribute to core theoretical questions about the identity itself, affect or emotion, and respect. The analytic approaches were the constant comparative technique, rank order comparison, and visual representation of coding, using MAXQDA, maybe in the future, could use triangulation methods. This study explores national identity, whereas substantial heterogeneity. Although our findings do not defy the common practice of using ethnicity as an 'objective' indicator of ideology, they do remind us that national identity is multidimensional and deserves more careful study.

## CONCLUSIONS

This article presented ways to measure opinions. The results of this research study, namely those who have a variety of perspectives in interpreting nationalism include pride in the nation, respect, love for the nation, maintaining unity in diversity, serving the nation, protecting the nation and implementing the nation's ideology. Loving and serving the nation are the two main dimensions that get the highest frequency associated with nationalism, as expressed by teenagers. In the group of young women participants, loving the nation took the highest frequency, while in men, serving the nation was the most prominent.

## REFERENCES

- American Psychological Association. (2002). *Developing adolescents: A references for professionals*. Washington, DC: Author.
- Anderson, B. R. O'G.. Indonesian Nationalism Today And in The Future. Retrieved from [https://ecommons.cornell.edu/bitstream/handle/1813/54161/INDO\\_67\\_0\\_1106955613\\_1\\_12.pdf?sequence=1](https://ecommons.cornell.edu/bitstream/handle/1813/54161/INDO_67_0_1106955613_1_12.pdf?sequence=1)
- Bonikowski, B. (2008). Research on American nationalism: Review of the literature, annotated bibliography, and directory of publicly available data sets
- Davidov, E. (2009). Measurement equivalence of nationalism and constructive patriotism in the ISSP: 34 countries in a comparative perspective. Retrieved from <http://pan.oxfordjournals.or>
- Devitt, J. (2019). Young children may see nationality as biological, new study suggests. Retrieved from <https://www.nyu.edu/about/news-publications/news/2019/february/young-children-may-see-nationality-as-biological--new-study-sugg.html>  
DOI: 10.1037/xge0000567
- DiMaggio, P., & Bonikowski, B. (2008). *Varieties of popular American nationalism*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.458.5434&rep=rep1&type=pdf>
- Karasar, N. (2003). *Method of scientific research*. Nobel Yayın Delivery.
- Papalia, D. E., Olds, S.W, & Feldman, R. D. (2009). *Human development* (9<sup>th</sup> ed.). Boston: McGraw-Hill.
- Roberts, K. (2015). Youth mobilisations and political generations: Young activists in political change movements during and since the twentieth century. *Journal of Youth Studies*, 18(8). Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/13676261.2015.1020937>
- Schwartz, S.J., Park, I. J. K., Huynh, Q. L., Zamboanga, B.L., Uman, A.J., Lee, R.M., & Rodriguez, L. (2012). The American identity measure: development and validation across ethnic group and immigrant generation. *Identity: An International Journal of Theory and Research*, 12:93–128, DOI: 10.1080/15283488.2012.668730
- Tian, Y. (2017). *Chinese national identity and media framing*. Retrieved from <https://scholarcommons.usf.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=8162&context=etd>
- Westle, B. (2014). How to measure or not measure national and European identity: Problems in quantitative approaches and possible direction of solution. Retrieved from <https://ecpr.eu/Filestore/PaperProposal/d000a579-cd86-4ea0-9f05-bf1631ec635f.pdf>
- Zakky. (2018). Teks sumpah pemuda yang asli dan benar. Retrieved from <https://www.zonareferensi.com/teks-sumpah-pemuda/>

# Children's Literacy Development: The Critical Role of Language

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## Abstract

Performance on standardised assessments of reading comprehension is predicted by children's language knowledge and skills, most notably vocabulary, grammar, and higher-level language skills of inference, comprehension monitoring, and knowledge and use of story structure. These skills develop before formal reading instruction begins and their further development is also supported by the developing reader's interactions with print. Educators should ensure that the early years curriculum fosters these language skills, in addition to the acquisition of word reading, and use oral language assessment to identify children at risk of reading comprehension failure to enable early intervention.

**Keywords:** *Children, language, reading development, comprehension*

## INTRODUCTION

In today's world, the ability to read is a valued and vital skill. In all economies (developed, emerging, and developing), literacy skills are associated with an individual's academic success, employment and health outcomes, with business productivity and wealth creation, and with societal crime rates and welfare dependency (World Literacy Foundation, 2015). Furthermore, the advent of digital technology has resulted in an increase in reading and writing in the social sphere: emails, text messaging and social media platforms are rapidly expanding sources of information, messages, and communications. Thus, more than ever, reading is an important skill that plays a central role in our lives. In this review, I will consider the knowledge bases, skills, and abilities that support literacy development, with a focus on the development of reading for meaning and the language skills that foster this critical aspect of literacy.

## METHODS

### *Beyond Decoding: Reading for Meaning*

The aim of most reading is to understand the meaning of the text. However, a major challenge for the beginner reader is to learn to decode the printed word. Slow, inaccurate, and effortful word reading means that, in early literacy development, the reader's attention is directed to decoding – or sounding out - the printed words on the page rather than extracting meaning from text (Perfetti, 1985). As a result, in the earliest stages of reading development, word reading is a very strong predictor of reading comprehension scores and a primary limiter of beginner readers' ability to extract meaning from text when reading (Storch and Whitehurst, 2002). There is now a broad body of research on the difficulties underlying poor word reading, such as weak phonological processing (Catts, 2006), and how best to teach these skills and intervene

for children who struggle in the acquisition of this component of reading ability (Hatcher, et al, 1994; Bus and van Ijzendoorn, 1999; Elbro and Petersen, 2004). This research has also translated into practice: early reading instruction typically focuses on teaching children how to decode the printed word.

However, good word reading skills are not sufficient to ensure good reading comprehension. As we read, word meanings are retrieved, they are grouped into meaningful grammatical units – clauses and sentences, and readers actively engage in inference making and monitor their understanding of the text as it unfolds. The varied theoretical accounts of text comprehension all agree that readers rapidly forget the precise vocabulary and grammatical structures used to convey the message, and construct a coherent representation of the state of affairs described by the text – often referred to as a mental model or situation model (McNamar and Magliano, 2009). Beyond word reading, critical language skills – vocabulary, grammar, inference making, comprehension monitoring, and knowledge and use of text structure are theorized to support readers in this process.

A large body of empirical research demonstrates the importance of these language skills for reading comprehension. First, when the majority of children acquire accurate and fluent word decoding skills at around 10 years of age, language comprehension skills become a stronger predictor of performance on assessments of reading comprehension than word reading (Garcia and Cain, 2014; LARRC, 2015). Second, individual differences in listening comprehension influence reading comprehension performance across the lifespan, from beginner readers through to adulthood (Garcia and Cain, 2014). Third, children with poor reading comprehension in the presence of age-appropriate word reading, typically have weak language skills that are apparent across a wide range of language assessments (Cain and Oakhill, 2006; Nation, et al, 2006). For these reasons, it is essential to understand early reading comprehension development and the language skills that foster its growth, to develop evidence-based early reading instruction to foster these skills, and interventions for those at risk of reading comprehension failure.

**RESULTS**

*The Language Bases of Reading Comprehension*

A substantial body of developmental research demonstrates that language skills are important from the earliest stages of reading acquisition. For example, vocabulary and grammatical knowledge, inference making skills, and the ability to monitor one’s understanding of the text, all support the prediction of concurrent reading comprehension scores in 6 year olds (Kim, 2015). These skills have been shown to make independent contributions to the prediction of concurrent reading comprehension scores in 7- to 11-year-olds, even after accounting for the contributions made by word reading, memory, and IQ (Cain, et al, 2004). Thus, if we wish to foster adequate reading comprehension, we need to understand the language bases of reading comprehension and their role in its development.

**Table 1. A short example text to illustrate some of the knowledge and skills involved in reading comprehension**

Bobby was busy with his bucket and spade. The sandcastle was nearly complete. Then a huge wave crashed onto the shore. The whole day’s work had been ruined and Bobby started to cry.
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Vocabulary knowledge. Vocabulary knowledge and reading comprehension are strongly associated from the beginning stages of reading through to adulthood: the greater the number of word meanings an individual knows, the higher their score on an assessment of reading comprehension (Carroll, 1993). Vocabulary has been described as a foundational skill for reading comprehension (Lepola, et al, 2012), because words make up the sentences that describe the events in the text. It has been shown that replacing just 1 in 5 words with ‘nonsense’ words (to ensure that their meanings were not known) is sufficient to significantly disrupt comprehension, and very few readers achieve adequate comprehension even when just 1 in 20 words are not known (Hu, Nation, 2000). So, individual word meanings can be considered the ‘building blocks’ of sentence and passage comprehension; they are necessary to extract the meaning of the text as a whole.

Vocabulary knowledge extends beyond knowledge of individual words, to knowledge of the associations between different words. Take the example text in Table 1. Knowledge of key words is essential to understand the individual sentences and the events that take place. But many words have multiple meanings. Knowing just the most frequently used meaning of ‘wave’ is not sufficient to understand the critical event in this example, that the wave wrecks the sandcastle. In addition, knowing that waves are formed by the sea, provides information about the likely setting of the story – a beach, which is not explicitly stated, but information that would enrich the mental model. Thus, the type of vocabulary knowledge needed to become a good reading comprehender, includes not only knowledge of individual word meanings, but also what is known about words that is represented as a lexicon of rich semantic networks with links between words related by topic (collocations, such as sandcastle and beach), shared features (cry, sob, wail) and related, but distinct, meanings (to wave hello, a wave in the ocean, a soundwave). Vocabulary knowledge is an important predictor of reading comprehension scores in 9-year-olds across the ability range: it predicts explains variance in the reading comprehension scores of poor, average, and good comprehenders (LARRC and Logan, 2017). Furthermore, both vocabulary breadth (how many words you know) and depth (what you know about those words) each make important contributions to reading comprehension (Tannenbaum, et al, 2006; Ouellette, 2006). This empirical research provides support for theoretical accounts proposing that the quality of lexical representations is an important factor in reading comprehension (Perfetti, 2007). Thus, vocabulary knowledge that is robust, precise, and which can be used flexibly across different contexts is critical to understand the meanings of individual sentences and to integrate their meanings to construct a coherent mental model of the text’s meaning.

The importance of grammar. Understanding sentences is a foundation to understanding connected prose. Most languages allow considerable flexibility in how we convey meaning, such that attention to word order alone is not always sufficient for accurate sentence comprehension. In English, the temporal connectives ‘before’ and ‘after’ can be used to convey different sequences in time: ‘He cleaned his room before he had finished his homework.’ vs ‘He cleaned his room after he had finished his homework.’ When events are expressed in chronological order, as in the first example, they are easier for young children to understand than when the events are described in reverse chronological order (Blything and Cain, 2015). The difficulty with some sentence structures such as reverse-chronological order has been related to the additional memory requirements needed to process and represent the actual meaning and order of events, as well as young children’s imprecise knowledge of the different meanings of ‘before’ and ‘after’ (Munte, et al, 1998; Messenger, et al, 2012). Other choices of expression entail different processing demands. For example, the second sentence in Table 1 could be written in a variety of ways that affect ease of comprehension: a simple description, for example: ‘The sandcastle was nearly complete’ or an active sentence construction that

specifies the sandcastle builder: ‘Billy completed the sandcastle’, or the more complex passive sentence construction: ‘The sandcastle was completed by Billy’. Knowledge of the individual word meanings or application of a rule of word order will not ensure accurate understanding of the meaning of the passive sentence, particularly when background knowledge does not provide clues to meaning, as in: ‘The bear was chased by the tiger.’ Children typically understand and produce simpler sentence constructions such as the active earlier than more complex constructions such as the passive (Messenger, et al, 2012).

Weak knowledge of grammar is a key marker of developmental language disorder (Rice, et al, 1996). Although knowledge of grammar is critical for sentence comprehension, several studies of typically developing children find that it is only a modest predictor of reading comprehension of connected prose when compared with the contribution made by vocabulary (Muter, et al, 2004; Velluntino, et al, 2007; Oakhill, et al, 2003). However, grammar extends from morphology (word structure) through to comprehension of complex multiclausal sentences. When the assessment of grammar includes both an appreciation of derivational and inflectional morphology and a range of syntactic constructions, grammatical knowledge is found to predict children’s reading comprehension scores across the ability range in 9-year-olds (LARRC and Logan, 2017), explaining unique variance in reading comprehension scores even after vocabulary, word reading, inference making, comprehension monitoring, knowledge of narrative structure, and memory have been taken into consideration. Grammatical knowledge may also be a stronger predictor of text comprehension in older than in younger readers, when reading more complex extended texts that include a range of syntactic constructions (Scott, 2009).

**Beyond words and sentences:** Higher-level skills that support the construction of the meaning-based representation of the text. Most reading material is longer than a single word or sentence. To construct a coherent mental model of the passage meaning, even for short texts such as our example in Table 1, readers need to integrate the meanings of successive clauses and sentences. Several language skills directly support this process: inference and integration, comprehension monitoring, and knowledge and use of text structure. Collectively, these are referred to as higher-level or discourse-level language skills (to contrast with vocabulary and grammar as foundational skills) (LARRC and Logan, 2017; Perfetti, et al, 2005).

The influence of these skills is apparent when we consider what’s involved in understanding the example text in Table 1. To integrate the meanings of successive sentences we need to generate inferences. The text does not state explicitly that Bobby used his bucket and spade to build the sandcastle, but readers (and listeners) draw on the background knowledge that children typically use a bucket and spade to make a sandcastle in order to integrate the meaning of the second sentence with the first to construct a coherent mental model of the text’s meaning. Otherwise, these two sentences stand unrelated. Skilled readers typically evaluate the adequacy of their comprehension as the text unfolds. If we replaced the final phrase ‘Bobby started to cry’ with ‘Bobby breathed a sigh of relief’ we would struggle to understand its meaning in relation to the rest of the text, if we were evaluating the adequacy of our comprehension. Finally, stories typically have a clear temporal and causal sequence, knowledge of which leads us to infer that Bobby’s tears are a response to the action of the wave.

These skills – inference and integration, comprehension monitoring, and knowledge and use of text structure, show marked development in young children during the early stages of reading development (Barnes, 1996; Baker, 1984; Stein and Glenn, 1982). There is strong evidence that they are important components of comprehension of connected prose. They predict listening comprehension in 6 year olds (Kim, 2015), and explain variance in reading comprehension over and above word reading, vocabulary, and grammar in children aged 7 to

11 years (Cain, et al, 2004). In addition, children with poor reading comprehension show difficulties with each of these higher-level language skills (Cain and Oakhill, 2006). Together, this work demonstrates that higher-level language skills exert a unique influence on how well children perform on standardised assessments of reading comprehension, in addition to vocabulary and grammar.

The early development of the language bases of reading comprehension. Each of the critical language skills discussed above develops before the start of schooling and formal reading instruction. Most children produce their first word between between 9 and 14 months, although there is then significant variation amongst children in the subsequent rate of vocabulary growth (Rowe, et al, 2012) By the time of their second birthday, most children are producing multiword utterances, for example ‘mummy shoe’ and ‘many cars’, showing an appreciation of grammar (Karmiloff-Smith and Karmiloff-Smith, 2002; Miller and Chapman, 1981). The use of higher-level language skills such as inference making, comprehension monitoring, and knowledge of narrative structure is evident before 3 years of age, with children inferring speaker intent to learn new word items and showing surprise if the order of events in a known story is transformed (Tomasello, et al, 2007; Skarakis-Doyle, 2002). This evidence indicates that should consider a focus on these skills, important for reading comprehension, before formal instruction begins.

Although our standardised language batteries and textbooks typically differentiate these dimensions of language, they are inter-related (LARRC, 2015). Theoretical accounts of language development provide explanation for these co-relations. For example, sentence comprehension and production depend on having a sufficient lexical base; as a result, different phases of grammar development are linked to different phases of lexical growth (Marchman and Bates, 1994). Specific words or phrases such as ‘once upon a time’, ‘compare’, ‘contrast’, and ‘consequently’ signal specific narrative and expository text structures; as a result, reading comprehension improves when instruction makes explicit these words and their relation to structure (Williams, 2005). Co-relations between vocabulary and inference making are also theorized. Some inferences are dependent on appropriate vocabulary knowledge, for example inferring that the new pet in a story that mentions a ‘waggy tail’, ‘furry coat’ and a ‘kennel’ is most probably a dog. In support of this, independent measures of vocabulary, in particular depth of vocabulary knowledge, are related to inference making ability (Cain and Oakhill, 2004). In addition, children are able to use contextual information in a passage to infer the most likely meaning of novel word (Cain, et al, 2004). There is evidence for reciprocal relations between different dimensions of language, such as vocabulary and inference making. In a recent 5-year longitudinal study that started when children were aged 4 to 5 years of age, inference making was measured by asking them to listen to a story and then answer inference-tapping questions such as ‘what was the new pet?’ that required them to combine information in the text with their vocabulary and background knowledge (LARRC, et al, in press). Their receptive and expressive vocabulary was also assessed. Vocabulary skills each year predicted inference making one year later, when children were aged 5 to 6, 6 to 7, and 7 to 8 years of age,; and inference skills each year predicted vocabulary one year later when aged 5 to 6, 6 to 7, and 7 to 8 years. This work strongly suggests that vocabulary and inference skills, both critical for reading comprehension, support each other’s development in the early phases of reading development. Testing for potential reciprocal relations between other language skills is needed to extend this body of knowledge.

## DISCUSSION

### *Reading Comprehension Development: Longitudinal Perspectives*

A number of studies have examined the longitudinal prediction of reading comprehension from early language skills in typically developing samples of children. Other studies have examined the consequences of initial reading comprehension on later reading-related and language skills. Longitudinal designs such as these can be used to test hypotheses about causality in development, because they test the temporal direction of influence. In general, this work demonstrates that language skills are important from the earliest stages of reading development, and that reading experience itself supports growth in key language and knowledge bases.

The longitudinal prediction of reading comprehension from early language skills. As noted, vocabulary and grammatical knowledge, and higher-level language skills are all evident in pre-readers and predict concurrent reading comprehension scores in beginner readers (Kim, 2015). We can measure these skills in the aural modality using listening and picture based tasks and examine how well they explain reading comprehension after formal instruction in reading has commenced. A recent study that adopted this approach first assessed children in preschool, when the sample were aged 4 to 5 years. The skills of vocabulary, grammar, and higher-level language were shown to predict listening comprehension 5 years later, and also reading comprehension, independently of word reading ability (LARRC and Chiu, 2018). Other studies that have followed slightly older children from the start of schooling also demonstrate a clear relation between early language skills and later reading comprehension (Storch and Whitehurst, 2002; Kendeou, et al, 2018). There are also strong concurrent correlations between an individual's ability to understand a text presented by ear or by eye, as well as their comprehension of static and animated picture sequences across the lifespan (Kendeou, et al, 2018; Kendeou, et al, 2008; Gernsbacher, 1990). Together, these findings demonstrate that the early language skills that enable pre-readers to extract meaning from picture books and stories read aloud, support later reading comprehension.

The influence of these language skills is also evident as reading skills develop. At around 7 to 8 years of age, children have experienced 2 or more years of formal reading instruction. Vocabulary and higher-level language skills (but not grammar) assessed at 7 to 8 years predict reading comprehension 4 years later, even when initial levels of reading comprehension have been controlled (Oakhill and Cain, 2012). Thus, over and above earlier reading ability, language skills influence progress. As children get older and word reading skills become more fluent, the texts used to assess reading comprehension become longer, and more complex, containing grammatical structures such as embedded relative clauses that are common in written text but not in everyday conversation (Scott, 2009). Thus grammatical knowledge may be a stronger predictor of text comprehension in older than in younger readers because it is more critical for constructing meaning from complex extended texts.

The influence of reading comprehension on later language skills. Many language and reading skills are considered developmentally unconstrained (Paris, 2005). An example of a constrained reading-related skill for an alphabetic writing system is letter knowledge: there is a finite number of letters to be learned, typically all readers learn all of the letters, and usually they are all learned over a short period of time. Vocabulary is an example of an unconstrained skill: the number of word meanings that could be learned is large (if not literally infinite) and we continue to learn new words across our lifetime. For vocabulary, at least, there is evidence of a relationship with reading comprehension across the lifespan (Carroll, 1993). Therefore, as well as considering the impact of the early development of key language skills on later reading



comprehension, we need to consider their ongoing development and how this might impact on the development of reading comprehension.

This issue has been studied in research that has identified children with poor reading comprehension and examined their development during the first few years of reading. In one study, good and poor comprehenders who had developed age-appropriate word reading skills were identified when aged 7 to 8 years (Cain and Oakhill, 2011). At the outset of the study, the two groups did not differ significantly on measures of written and receptive vocabulary, but there were significant differences between the groups four years later. Another study that focused on morphological awareness and its development in good and poor comprehenders between grades 3 and 5, only found evidence for poor comprehenders' weaknesses in grade 5 (Tong, et al, 2011). These emerging differences in unconstrained skills have been referred to as Matthew Effects (Stanovich, 1986), whereby weaker readers develop at a slower pace than poorer readers across time, not just in reading ability but also in reading-related skills (Duff, et al, 2015).

Why should these differences emerge? One proposed mechanism is differential exposure to print. The language of books is richer than speech in terms of vocabulary and syntax and text structure (Scott, 2009; Cunningham and Stanovich, 1998). Thus, print affords greater learning opportunities than conversation. Research shows that measures of children and adults' leisure time reading are related to reading-related skills and knowledge critical to reading comprehension (Cunningham and Stanovich, 1998; Echols, et al, 1996). Thus, if poorer comprehenders engage in less reading than good comprehenders, or choose to read simpler less challenging texts, or process texts only superficially, their language skills may develop more slowly, further impacting on their already weak reading comprehension skills.

## CONCLUSIONS

This review of the language bases of reading comprehension development demonstrates that reading comprehension draws on a range of language skills and knowledge that develop well before formal literacy instruction. These skills predict later reading comprehension performance, even from preschool, and are often weak in children with reading comprehension problems. In addition, poor reading comprehension may be related to reduced growth in language knowledge through the mechanism of print exposure. This research base provides critical insights to inform practice to ensure that early literacy instruction and experiences support the development of the skills that underpin reading comprehension.

A first recommendation is that the language skills and knowledge that are critical for good reading comprehension should be supported early in development. This can occur through rich and meaningful interactions with print during shared book reading and similar activities in the home, preschool, and the classroom, before reading instruction begins. This requires that children engage with a range of written material that includes rich vocabulary, varied syntactic structures, and which promotes active use of the higher-level language skills that support the extraction of meaning from text. Because of the strong relations between oral language skills, listening comprehension, and reading comprehension, even non-readers, beginner readers, and poor word readers can experience a range of rich written material through the aural modality to develop these skills before they develop word reading fluency. Second, because of the strong evidence for the language bases of reading comprehension, we should use oral language assessment to identify children at risk of reading comprehension failure and intervene early, rather than waiting until reading comprehension itself has failed to develop. Third, due to the influence of reading itself with reading comprehension and reading-related skills, we should

foster children's enjoyment of reading to motivate a lifelong habit to support the further development of the language bases of reading comprehension.

## REFERENCES

- Baker, L., Children's effective use of multiple standards for evaluating their comprehension. *Journal of Educational Psychology*, 1984. 76: p. 588-597.
- Barnes, M.A., M. Dennis, and J. Haefele-Kalvaitis, The effects of knowledge availability and knowledge accessibility on coherence and elaborative inferencing in children from six to fifteen years of age. *Journal of Experimental Child Psychology*, 1996. 61: p. 216-241.
- Blything, L., R. Davies, and K. Cain, Young children's comprehension of temporal relations in complex sentences: the influence of memory on performance. *Child Development*, 2015. 86: p. 1922-1934.
- Bus, A.G. and M.H. van Ijzendoorn, Phonological awareness and early reading: A meta-analysis of experimental training studies. *Journal of Educational Psychology*, 1999. 91: p. 403-414.
- Cain, K. and J. Oakhill, Reading comprehension and vocabulary: Is vocabulary more important for some aspects of comprehension? *L'Année Psychologique*, 2014. 114: p. 647-662.
- Cain, K. and J.V. Oakhill, Matthew Effects in young readers: reading comprehension and reading experience aid vocabulary development. *Journal of Learning Disabilities*, 2011. 44: p. 431-443.
- Cain, K. and J. Oakhill, Profiles of children with specific reading comprehension difficulties. *British Journal of Educational Psychology*, 2006. 76: p. 683-696.
- Cain, K., J.V. Oakhill, and P. Bryant, Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology*, 2004. 96: p. 31-42.
- Cain, K., J.V. Oakhill, and K. Lemmon, Individual differences in the inference of word meanings from context: the influence of reading comprehension, vocabulary knowledge, and memory capacity. *Journal of Educational Psychology*, 2004. 96: p. 671-681.
- Carroll, J.B., *Human cognitive abilities: A survey of factor-analytic studies*. 1993, New York: Cambridge University Press.
- Catts, H.W., S.M. Adlof, and S.E. Weismer, Language deficits in poor comprehenders: A case for the simple view of reading. *Journal of Speech, Language, and Hearing Research*, 2006. 49: p. 278-293.
- Cunningham, A.E. and K.E. Stanovich, What reading does for the mind. *American Educator*, 1998. 22: p. 8-15.
- Duff, D., J.B. Tomblin, and H. Catts, The influence of reading on vocabulary growth: A case for a Matthew Effect. *Journal of Speech Language and Hearing Research*, 2015. 58: p. 853-864.
- Echols, L.D., et al., Using children's literacy activities to predict growth in verbal cognitive skills: A longitudinal investigation. *Journal of Educational Psychology*, 1996. 88: p. 296-304.
- Elbro, C. and D.K. Petersen, Long-term effects of phoneme awareness and letter sound training: An intervention study with children at risk for dyslexia. *Journal of Educational Psychology*, 2004. 96: p. 660-670.
- Garcia, J.R. and K. Cain, Decoding and reading comprehension: A meta-analysis to identify which reader and assessment characteristics influence the strength of the relationship in English *Review of Educational Research*, 2014. 84: p. 74-111.

- Gernsbacher, M.A., K.R. Varner, and M. Faust, Investigating differences in general comprehension skill. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 1990. 16: p. 430-445.
- Hatcher, P.J., C. Hulme, and A.W. Ellis, Ameliorating early reading failure by integrating the teaching of reading and phonological skills: The phonological linkage hypothesis. *Child Development*, 1994. 65: p. 41-57.
- Hu, M. and I.S.P. Nation, Unknown vocabulary density and reading comprehension. *Reading in a Foreign Language*, 2000. 13: p. 403-430.
- Karmiloff-Smith, K. and A. Karmiloff-Smith, *Pathways to Language: From Fetus to Adolescent*. The Developing Child, ed. J. Bruner, M. Cole, and A. Karmiloff-Smith. 2002, Cambridge, MA: Harvard University Press.
- Kendeou, P., et al., Predicting reading comprehension in early elementary school: the independent contributions of oral language and decoding skills. *Journal of Educational Psychology*, 2009. 101: p. 765-778.
- Kendeou, P., et al., Children's inference generation across different media. *Journal of Research in Reading*, 2008. 31: p. 259-272.
- Kim, Y.S., Language and cognitive predictors of text comprehension: Evidence from multivariate analysis. *Child Development*, 2015. 86: p. 128-144.
- Language and Reading Research Consortium (LARRC) M.M.L. Muijselaar, and N.K. Currie, Inference making in young children: the concurrent and longitudinal contributions of verbal working memory and vocabulary. *Journal of Educational Psychology*, in press.
- Language and Reading Research Consortium (LARRC) and Y.-D. Chiu, The Simple View of Reading across development: the prediction of grade 3 reading comprehension by prekindergarten skills. *Remedial and Special Education*, 2018. 39: p. 289-303.
- Language and Reading Research Consortium (LARRC) and J. Logan, Pressure points in reading comprehension: A quantile multiple regression analysis. *Journal of Educational Psychology*, 2017. 109: p. 451-464.
- Language and Reading Research Consortium (LARRC), Learning to read: Should we keep things simple? *Reading Research Quarterly*, 2015. 50: p. 151-169.
- Language and Reading Research Consortium (LARRC), The dimensionality of language ability in young children. *Child Development*, 2015. 86: p. 1948-1965.
- Lepola, J., et al., The role of inference making and other language skills in the development of narrative listening comprehension in 4–6-year-old children. *Reading Research Quarterly*, 2012. 47: p. 259-282.
- Marchman, V.A. and E. Bates, Continuity in lexical and morphological development: A test of the critical mass hypothesis. *Journal of Child Language*, 1994. 21: p. 339-366.
- McNamara, D.S. and J. Magliano, Toward a comprehensive model of comprehension, in *Psychology of learning and motivation*, B. Ross, Editor. 2009, Academic Press: Burlington. p. 297-384.
- Messenger, K., H.P. Branigan, and J.F. McLean, Is children's acquisition of the passive a staged process? Evidence from six-and nine-year-olds' production of passives. *Journal of Child Language*, 2012. 39: p. 991-1016.
- Miller, J.F. and R.S. Chapman, The relation between age and mean length of utterance in morphemes. *Journal of Speech, Language, and Hearing Research*, 1981. 24: p. 154-161.
- Munte, T.F., K. Schiltz, and M. Kutas, When temporal terms belie conceptual order. *Nature*, 1998. 395: p. 71-73.
- Muter, V., et al., Phonemes, rimes, vocabulary and grammatical skills as foundations of early reading development: evidence from a longitudinal study. *Developmental Psychology*, 2004. 40: p. 665-681.

- Nation, K., et al., Hidden language impairments in children: Parallels between poor reading comprehension and Specific Language Impairment? *Journal of Speech, Language, and Hearing Research*, 2004. 47: p. 199-211.
- Perfetti, C.A., *Reading Ability*. 1985, New York: Oxford University Press.
- Oakhill, J.V. and K. Cain, The precursors of reading comprehension and word reading in young readers: Evidence from a four-year longitudinal study. *Scientific Studies of Reading*, 2012. 16: p. 91-121.
- Oakhill, J.V., K. Cain, and P.E. Bryant, The dissociation of word reading and text comprehension: Evidence from component skills. *Language and Cognitive Processes*, 2003. 18: p. 443-468.
- Ouellette, G.P., What's meaning got to do with it: The role of vocabulary in word reading and reading comprehension. *Journal of Educational Psychology*, 2006. 98: p. 554-566.
- Paris, S.G., Reinterpreting the development of reading skills. *Reading Research Quarterly*, 2005. 40: p. 184-202.
- Perfetti, C.A., Reading ability: Lexical quality to comprehension. *Scientific Studies of Reading*, 2007. 11: p. 357-383.
- Perfetti, C.A., N. Landi, and J.V. Oakhill, The acquisition of reading comprehension skill, in *The science of reading: a handbook*, M.J. Snowling and C. Hulme, Editors. 2005, Blackwell Publishers: Oxford.
- Rice, M.L. and K. Wexler, Toward tense as a clinical marker of specific language impairment in English-speaking children. *Journal of Speech and Hearing Research*, 1996. 39: p. 1239-1257.
- Rowe, M.L., S.W. Raudenbush, and S. Goldin-Meadow, The pace of vocabulary growth helps predict later vocabulary skill. *Child Development*, 2012. 83: p. 508-525.
- Scott, C.M., A case for the sentence in reading comprehension. *Language, Speech, and Hearing Services in Schools*, 2009. 40: p. 184-191.
- Skarakis-Doyle, E., Young children's detection of violations in familiar stories and emerging comprehension monitoring. *Discourse Processes*, 2002. 33: p. 175-197.
- Stanovich, K.E., Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 1986. 21: p. 360-406.
- Stein, N.L. and C.G. Glenn, Children's concept of time: The development of a story schema, in *The developmental psychology of time*, W.J. Friedman, Editor. 1982, Academic Press: New York.
- Storch, S.A. and G.J. Whitehurst, Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 2002. 38: p. 934-947.
- Tannenbaum, K.R., J.K. Torgesen, and R.K. Wagner, Relationships between word knowledge and reading comprehension in third-grade children. *Scientific Studies of Reading*, 2006. 10: p. 381-398.
- Tomasello, M., M. Carpenter, and U. Liszkowski, A new look at infant pointing. *Child development*, 2007. 78: p. 705-722.
- Tong, X., et al., Morphological awareness: A key to understanding poor reading comprehension in English. *Journal of Educational Psychology*, 2011. 103(3): p. 523-534.
- Vellutino, F.R., et al., Components of reading ability: Multivariate evidence for a convergent skill model of reading development. *Scientific Studies of Reading*, 2007. 11: p. 3-32.
- Williams, J.P., Instruction in reading comprehension for primary-grade students: A focus on text structure. *The Journal of Special Education*, 2005. 39: p. 6-18.
- World Literacy Foundation, *The economic and social cost of illiteracy: A snapshot of illiteracy in a global context*. 2015.

# The Effectiveness of Expressive Writing to Improve Post-Traumatic Growth for Earthquake Victims in Lombok, West Nusa Tenggara

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## Abstract

Aim of this study was to test the effectiveness of expressive writing on victims using Expressive Writing module by Hapsari (2012) which previously used for survivors of domestic violence, researchers wanted to test whether the same module could also be applied to improve the post traumatic growth in victims of natural disaster. This study used experimental method with one group pretest-posttest design. The effectiveness test has been done on 10 participants using the experimental group of pretest-posttest with the scale post traumatic growth showed post-traumatic growth ( $SD = 10.5$ ) and significance ( $p = 0.013$ ), thus the expressive writing module is effective to improve post traumatic growth on victims in Lombok. However, by FGD process found conditions to develop post-disaster growth that relevant with disaster victims condition, such as consideration of the place, duration and theme, so that it will modify based on the needs of the disaster victims although it is effective

**Keywords:** *Expressive Writing, Disaster Victims, Post-Traumatic Growth*

## INTRODUCTION

Indonesia has high potential of natural disasters. The Indonesian Disaster Information Data (2018) shows that in 2018 there were 3,397 natural disasters with 3,874 people dead and missing, 21,171 people injured, and 563,135 people got impact and displaced, moreover the natural disaster rise gradually from 2015 to 2018. West Nusa Tenggara is one of provinces that have a sustained earthquake with the biggest impact in 2018, 436 people dead, 1,353 people injured, besides the economic impact of more than 5, 04 trillion rupiahs (Nugroho, 2018). The impact of natural disasters not only results in physical crisis, but also psychological crisis such as trauma. It will lead to negative or positive consequences (Bensimon, 2012). The negative consequence of trauma is post-traumatic stress disorder, while the positive consequence of trauma is post-traumatic growth. Everyone who has experienced trauma is expected to experience positive consequences so that they can grow to be stronger and more.

The post-traumatic growth refers to individual persistence to deal with stress and post-disaster reality (Werdel & Wicks, 2012). Post-traumatic growth consists of five aspects, such as improving relationships with others, improving self-power, identifying new possibilities or opportunities, positive spiritual changes, and improving life appreciation (Tedeschi & Calhoun, 2004b). Post-traumatic growth is not a direct result of trauma, but as result of struggle and persistence of individuals to face post-traumatic reality, so it will

determine the extent of growth in these individuals (Tedeschi & Calhoun, 2004c). The process of achieving post-traumatic growth will be faster with the presence of social support, the Schexnaildre study (2011) and Bozo et al. (2009) prove that social support predicts post-traumatic growth. Social support for the victims can be given instrumentally such as by expressive writing therapy.

Expressive writing therapy is the activity of writing about thoughts and emotions related to the problems or traumatic events (Pennebaker, 1989, in Gebler & Maercker, 2007). Nixon and Kling's (2009) study examined expressive writing therapy in 10 people who had experienced traumatic events, found that future-oriented expressive writing therapy significantly reduced post-traumatic stress disorder and symptoms of depression, and unsolved trauma belief. Other studies on the effects of expressive writing on 10 women as victims of domestic violence show the results that expressive writing can reduce their post-traumatic stress symptoms (Hapsari, 2012). The Smyth, Hockemeyer, and Tulloch (2010) study tested expressive writing interventions for individuals experiencing post-traumatic stress disorder (PTSD), the results of the study showed that expressive writing interventions were safe to administer and participants experienced improve mood and post-traumatic growth. The objective of this study is test the effectiveness of expressive writing therapy for earthquake victims. The hypothesis of this study is there are differences of post-traumatic growth before (pretest) and after (posttest) expressive writing therapy given.

## METHOD

### *Design*

This study used experimental method with *one group pretest-posttest* design .

Table 1. Experimental Design

O1	X	O2
Pretest	Treatment	Posttest

Information:

O<sub>1</sub> : *pre-test*

X : expressive writing therapy

O<sub>2</sub> : *post-test*

Pre-test was given one week before treatment while post-test was given one week after treatment. The effectiveness of expressive writing therapy can be seen from the difference between the *gain score* obtained from the comparison of the *pre-test* and *post test*

### *Instrument*

Post-traumatic growth rates before and after treatment of expressive writing therapy using post-traumatic growth scales consisting of aspects of enhancing relationships with others, identifying new possibilities or opportunities, personal strengths, positive spiritual changes, and improvement in life appreciation. The post-traumatic growth scale is 21 items with reliability coefficient is 0.891.

Score minimal in pre-test post-traumatic growth scales is 65 and score maximal in pre-test post-traumatic growth scales is 78. Score minimal in post-test post-traumatic growth scales is 75 and score maximal in post-test post-traumatic growth scales is 81.

### *Treatment guidance*

Expressive writing therapy uses a modified guidance from the expressive writing stage developed by Hapsari (2012). The stages of experimental writing therapy were given over three days in seven sessions. Guidelines for expressive writing therapy are explained in table 2.

Table 2.  
Expressive Writing Guidance

Day	Session	Duration	Activities	Objectives
1	I	±30 minutes	<b>BUILDING RAPORT</b> 1. Introduction 2. The explanation of activity	<ul style="list-style-type: none"> <li>• To create good relationships and mutual trust between researcher and participants, also among participants.</li> <li>• Participants received information about the objectives and research process</li> <li>• Participants know their rights during research.</li> </ul>
	II	±30 minutes	<b>PRE-EXPRESSIVE WRITING</b> 1. Explanation of expressive writing 2. Explanation of how to fill in daily sheets. 3. Question and Answer	<ul style="list-style-type: none"> <li>• Participants know about expressive writing.</li> <li>• Participants understand and how to use the daily sheets.</li> <li>• Participants get information about the activities that will held</li> </ul>
	III	±30 minutes	<b>EXPRESSIVE WRITING SESSIONS</b>	<ul style="list-style-type: none"> <li>• Participants tell and describe traumatic events or those that have negative effects that have been experienced through writing media.</li> </ul>

2	IV	Flexible	EXPRESSIVE WRITING SESSION (done at home / their residence and adjusts with participants' daily activities)	<ul style="list-style-type: none"> <li>• Participants tell and describe traumatic events or those that have negative effects that have been experienced through media</li> </ul>
3	V	±30 minutes	<p>THE PROBLEMS IDENTIFICATION AND EXPECTATIONS:</p> <ol style="list-style-type: none"> <li>1. <i>Review</i> previous meetings</li> <li>2. Knowing subject problems</li> <li>3. Know what the subject expects from expressive writing</li> </ol>	<ul style="list-style-type: none"> <li>• Know the subject matter in the previous writing session</li> <li>• Participants tell what to expect after doing sessions expressive writing twice.</li> </ul>
	VI	±60 minutes	SESSION OF TELLING THE EXPRESSIVE WRITING	<ul style="list-style-type: none"> <li>• Participants are given the chance to share their traumatic experiences or those that have negative effects that have been experienced by speech.</li> </ul>
	VII	±30 minutes	<p>CLOSING:</p> <ol style="list-style-type: none"> <li>1. Providing suggestions from participants about expressive writing sessions</li> <li>2. The researcher closed the entire expressive writing session and thank participants.</li> </ol>	<ul style="list-style-type: none"> <li>• Participants provide suggestions for the implementation of expressive writing in the future.</li> </ul>

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Source: Hapsari (2012)



### Location and participants

This research was conducted in Kekalik Jaya, Mataram, West Nusa Tenggara. Participants come together to hall Kekalik Jaya office to get treatment expressive writing therapy. Participants were 10 people, 2 men and 8 women, with the age range between 30-51 years, level of education is not educated up to bachelor degree program. Participants were victims of earthquake who became refugees for two months and experienced sustained earthquakes.

## RESULTS AND DISCUSSION

Table 3.  
The Comparison of Hypothetic Data and Empirical Data

Variable	Hypothetic Data				Empirical Data			
	Max	Min	Mean	SD	Ma x	Min	Mean	SD
Post Trauma Growth (Pretest)	8 4	2 1	52.5	10,5	64	5 3	58.40	3,893
Post Trauma Growth (Posttest)					66	60	63.10	1,729

Table 3 shows that the empirical mean post-traumatic growth is 58.40 and 63.10 pretest higher when compared to the hypothetical mean 52.5. The empirical standard deviation of pretest is 3,893 and posttest 1,729 which lower than the hypothetical standard deviation is 10.5 so that the study participants have a higher tendency of growth with less variation .

Table 4 .  
Category of Research Participants

Variable	Range	Category	Total subject	Percent
Post-Traumatic Growth ( Pretest )	$X < 55$	Low	2	20.00%
	$55 \leq X < 62$	Mediocre	6	60.00%
	$X \geq 62$	High	2	20, 00%
Post-Traumatic Growth ( Postest )	$X < 61$	Low	1	10.00%
	$61 \leq X < 65$	Mediocre	7	70.00%
	$X \geq 65$	High	2	20.00%

Based on table 4, it was found that most participants were in the mediocre category for post-traumatic growth. From the results of the categorization of ASI, it can be concluded that the study participants had a tendency towards mediocre post-traumatic growth .

Table 5.  
Wilcoxon Test Results

Variable	Z	Sig (p)
Growth of Post Traumatic Pretest Posttest	-2,942	p = 0.013 (p < 0,05)

Based on the analysis using the Wilcoxon test in table 5, the value of Z calculated was -2.942 with significance level is  $p = 0.013$  ( $p < 0.05$ ), therefore the research hypothesis was accepted.

## DISCUSSION

This research proves that expressive writing therapy can improve the post-traumatic growth of disaster victims. The research hypothesis was accepted with 0.05 significance level. These results support previous research conducted by Smyth, et al. (2010) which showed that expressive writing interventions improve post-traumatic growth. Expressive writing therapy in this study was conducted for three meetings to reduce the symptoms of post-traumatic stress to improve the post-traumatic growth, which relevant with Pennebaker & Chung (2007) and Baikie & Wilhelm (2005) suggestions.

The expressive writing activities for disaster victims will stimulate the integration of thoughts and feelings that will provide understanding, hope, and plan to solve the traumatic problems caused by disasters to improve the potential of post-traumatic growth. Expressive writing activities facilitate the expression of feelings and thoughts more free and privacy so that someone can be more honest and candid, especially for introvert people and not prefer to tell problems by speech.

As implementation, participants wrote about their thoughts and feelings about the disaster event that they experienced freely, the participants' writing was not assessed whether it is right or wrong, moreover there was no rules in writing. It was because everyone has different thoughts, feelings, experiences, and writing abilities. Expressive writing therapy is a new activity for participants. Participants of expressive writing therapy said they were happy because they could express their feelings through written media, and also they said that writing down their thoughts and feelings about the disaster made them see their problems and take lessons from that event.

The limitation of this study is that participants are limited to 10 people only, it is expected that there are more studies in the future that improve the number of participants with various characteristics. The sustainability of this research is making of expressive writing therapy modules which planned to be tested on participants and larger scale. However, in the trials recently after the experiments, researchers also enrich the data by conducting FGDs to find out better whether or not the implementation of expressive writing is relevant with what the subject need. The result of FGD is participants think the activity is helpful where the group could gather with other victims who experienced similar events, having a support group. However, the better writing must be done at home or in a place with no distraction. Participants admitted that they would be more optimal if there was break time and not continuously writing, due to draining physical and emotional. This note will then be examined by researchers to develop expressive writing modules for disaster victims in the future studies.

## CONCLUSION

The findings of expressive writing effectiveness test to increase post traumatic growth indicate effective changes for participants, which means that expressive writing can improve the quality of relationship, identifying personal strengths, spiritual changes towards more positive directions and more appreciate life. In the future study, the module will be modified by input the findings of FGD and also conducting experiments with more participants as the victims of natural disaster.

## REFERENCES

- Baikie, K. A., & Wilhelm, K. (2005). Emotional and physical health benefits of expressive Writing. *Advance in Psychiatric Treatment*, 11, 338-346.
- Bensimon, M. (2012). Elaboration on the association between trauma, PTSD, and posttraumatic growth, the role of trait resilience. *Personality and Individual Differences*, 52, 782-787. doi:10.1016/j.paid.2012.01.011
- Bozo, O., Gundogdu, E., & Colak, C. B. (2009). The moderating role of different sources of perceived social support on the dispositional optimism posttraumatic growth relationship in postoperative breast cancer patients. *Journal of Health Psychology*, 14(7), 1009–1020. doi: 10.1177/1359105309342295
- Data Informasi Bencana Indonesia (2018). Jumlah Kejadian Bencana Alam. Badan Nasional Penanggulangan Bencana, diakses 29 Juli 2019 dari <http://dibi.bnpb.go.id>
- Gebler, F., & Maercker, A. (2007). Expressive writing and existensial writing in Coping with Traumatic Experiences. *Trauma & Gewalt*, 4, 264-272.
- Hapsari, A. D. 2012. pengaruh menulis ekspresif terhadap simptom-simtom gangguan stres pasca trauma pada perempuan korban kekerasan dalam rumah tangga. (Tesis tidak diterbitkan). Fakultas Psikologi Universitas Gadjah Mada, Yogyakarta
- Nixon, R. D., & Kling, L. W. (2009). Treatment of Adult Post-Traumatic Stress Disorder Using a Future-Oriented Writing Therapy Approach. *The Cognitive Behaviour Therapist*, 2, 243-255.
- Nugroho, S.P (2018). Dampak Gempa Lombok : 436 Orang Meninggal dan Kerugian Ekonomi Lebih Dari 5.04 Trilyun Rupiah. Badan Nasional Penanggulangan Bencana, diakses 29 Juli 2019 dari <https://bnpb.go.id/dampak-gempa-lombok-436-orang>
- Pennebaker, J. W., & Chung, C. K. (2007). Expressive writing: connections to physical and mental health. Dalam H. S. Friedman, *Oxford handbook of health psychology* (hal. 1-31). New York: Oxford University Press.
- Schexnaildre, M. A. (2011). Predicting posttraumatic growth: coping, social support, and posttraumatic stress in children and adolescents after hurricane katrina (Master's thesis). Diperoleh dari Proquest Dissertations and Theses database.
- Smyth, J M. Hockemeyer, J R. Tulloch, H. 2010. Expressive writing and post-traumatic stress disorder: Effects on trauma symptoms, mood states, and cortisol reactivity. The British Psychological Society
- Tedeschi, R. G., & Calhoun, L. G. (2004b). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1-18.
- Tedeschi, R. G., & Calhoun, L. G. (2004c). Posttraumatic growth: A new perspective on psychotraumatology. *Psychiatric times*, 21(4), 58-59.
- Werdel, M, B., & Wicks, R. J. (2012). Primer on posttraumatic growth: An introduction and guide. United States of Amerika: John Wiley & Son

# Counselors Performance Assessment In SMPN 49 Jakarta Timur

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## Abstract

This study intends to obtain a performance assessment counselor at Junior High School 49 Jakarta Timur. This type of research is classified in descriptive research. Altruistic motives always drive guidance and Counseling teachers or school counselors in organizing expert guidance and counseling services, empathic attitude, respect for diversity, as well prioritizes counselees' interests by always looking at the long-term impact of the services provided. With this statement, the school counselors need to get an assessment of the performance given by the four elements, namely Assessor: Professor BK itself will judge him, Coworkers, Principal, and Students. Being the right performance required for performance counseling teachers/counselor is strongly influenced by the quality control of all four of these competencies are based on attitudes, values, and personal tendencies that support. Academic competence and professional integrity counselor are integrated to build pedagogical, social, and professional personality. Recognition explicitly turns and position alignment between educators, including counselors, have the task context, performance expectations, and setting specific services that contain the uniqueness and differences. The result shows Counselors at SMPN 49 Jakarta Timur get average results from all respondents 127.25, which means that the performance of teachers in the classification Good BK. For that, we need the support of the school's stakeholders can achieve very good classification, and receive positive inputs to develop the performance of the school counselor

**Keywords:** *Counseling Teacher, Counselor, Assessment and Performance*

## INTRODUCTION

Ministerial Regulation No. 27 of 2008 shows that guidance and counseling is one of the important components in encouraging the attainment of the objectives of education and other forms of government efforts to improve the quality of education in Indonesia. In this connection, guidance and counseling teacher is a major factor for the implementation of guidance and counseling services.

According to Usman (2010: 488), the result of the performance and progress of a person/group of people in achieving the goals set. Besides, Supardi (2013: 47) suggests that the performance is the result of someone's work that has been achieved within an organization to achieve objectives based on the standardization of the size and timing are tailored to the type of work and following the norms and ethics that have been set.

Each classification, educators, including counselors, have unique performance expectations. Teacher performance expectations BK / BK counselor service delivery is always driven by altruistic motives, empathy, respect for diversity, and put the interests of clients, always looking at the long-term impact of the service rendered (Ministerial Regulation No. 27 of 2008).

Context task counseling teacher/counselor is within the service area, which aims to develop the potential and counseling's independence in decision-making and choice to realize a productive life, prosperity, and general welfare care. Guidance and counseling teacher/counselor is holder expert guidance and counseling services, especially in the formal and non-formal education channels.

Each classification educators, including a counseling teacher/counselor, has a unique context of the tasks and performance expectations. Standard academic qualifications and competence of counseling teacher/counselor developed and formulated based on a framework which confirms think the context of the tasks and performance expectations counseling teacher/counselor.

Teacher Performance, BK/counselor, is strongly influenced by the quality control of all four of these competencies are based on attitudes, values, and personal tendencies that support. Academic competence and professional integrity counselor are integrated to build pedagogical, social, and professional personality. Recognition explicitly turns and position alignment between educators, including counselors, have the task context, performance expectations, and setting specific services that contain the uniqueness and differences. Various changes were made to strengthen the efforts of guidance and counseling as a profession. Nevertheless, it must be recognized that to achieve guidance and counseling as a profession that can provide many benefits.

Performance (performance) is the willingness and ability to do a job. Drucker stated performance is what can be done, someone. In a large dictionary, Indonesian, performance means something that can be achieved, demonstrated achievement and employability. Based on the various versions of the above understanding, it can be concluded, performance is the ability to do work that can be seen, and achievements are displayed.

Performance by Mangkunagara (2000: 67) is the result of the quality and quantity of work achieved by a person in implementing the assignment of employees in accordance with the responsibilities that have given to him. Then Sulistyani (2003: 223) describes an individual's performance is a combination of ability, effort, and opportunity can be judged from their work. While Hasibuan (2001: 34) suggests, performance is a result of work achieved in executing the tasks assigned to them based on skills, experience, and sincerity as well as time.

Performance is a condition of the money that must be identified and informed to certain parties to determine the level of achievement of results associated with the vision of installations assigned to an organization or company and to know the positive and negative impacts of operational policy. Mink (1993: 76) expressed his opinion that individuals with high performance have some characteristics of some of them; (A) the achievement-oriented (b) have confidence (c) of restraint and (d) competence.

Baharudin (2008: 14) says that the performance is a result of a person's overall success rate during certain periods of duty compared to the possibilities. If the origin of his visits, said the performance of translation performance, according to The Scribner Bantam English Dictionary Baharudin publication cited the United States and Canada comes from the root word "performance" with several meanings: (1) perform, execute, execute; (2) meet or obligation of an intention or vow; (3) implement or enhance the responsibility; and (4) do something that is expected of a person.

Performance is the function of work is to produce the result. If people know what they are supposed to do, get feedback on how they are not doing it, and get rewarded for doing what they are supposed to be doing, companies will be more likely to get the output and results they

desired. Francesco Sofo (2000: 203) Performance has a function that will produce something, when someone gets support, as well as getting feedback on what they did against a company that will produce a good output.

Achmad S.Ruky (2004: 5) says performance can also be defined as planning, directing, and controlling employee achievements.

While Jiwo Wungu (2003: 9) said, the performance is a term used to designate a joint understanding of the three cases, the work behavior, potential employees as internal factors that enable the emergence of workplace behavior, and the work itself.

Thus the performance or the work can be summed up as the quantity and quality of the work achieved by a person compared to the target or targets someone at his work. Factors used to assess individual performance should be adjusted to the level of interest.

According to Mangkunagara (2000), factors that affect performance include:

1. Capabilities Factor

Psychologically the ability of employees consists of the potential ability (IQ) and the ability of reality (education). Therefore, an employee needs to be placed on the work in accordance with his expertise

2. Motivation Factor

Motivation is formed from the attitude of an employee in a situation that drives self-directed employees to achieve business objectives. Mental attitude is a mental condition that encourages a person to try to achieve the maximum potential work.

According to Mc Cleland (in Mangkunagara, 2001) state that there is a positive relationship between achievement motive with achieving work. Achievement motivation is an urge in a person to perform an activity or task as well as possible to be able to achieve a commendable job with the predicate. Furthermore, Mc. Cleland suggested six characteristics of a person who has a high motive, namely:

- a. Have a high responsibility
- b. Dare to take risks
- c. Having reasonable goals
- d. Have a thorough work plan and strive to realize the goal.
- e. Utilizing feedback concrete in all work-related activities.
- f. Looking for an opportunity to execute the plan.

According to Gibson (1987), there are three factors that affect the performance of:

- a. Individual factors: ability, skill, family background, work experience, level of social, and demographic someone.
- b. Psychological factors: perception, role, attitude, personality, motivation, leadership, awards system.

Performance counseling teacher/counselor at school related to their main tasks. The principal tasks of counselor concerning services. Erickson (in Mortensen and Schumuller) the individual explain inventory, the counseling, the information services, the placement services, and the follow-up services.

Based on the above opinion, counseling service activities include data collection, counseling, information search, placement, and follow-up. Furthermore, Bernard and Fullmer added

research and consultant, which means understanding and consultation. The task of counseling teacher/counselor is to recognize students with a variety of characteristics, individual counseling, guidance and counseling groups, carry out career guidance including education and career information, placement, follow-up and assessment, consultation with teachers, all school personnel, parents, students, groups and community.

Many activities can be done by the counselor at the school, such as the collection of student data, providing information services, individual counseling, group counseling, career counseling, placement services, consultation with personnel, other schools, and follow-up.

The principal tasks in the school guidance counselor, (1) Develop a mentoring program, namely counseling plans for personal guidance, learning, social counseling, and career guidance; (2) implement guidance program, of carrying out the service function of understanding, prevention, maintenance, and development in all areas of service, (3) evaluation of counseling services, (4) an analysis of the evaluation results, and (5) follow-up.

According to Sukardi (1983) that a counselor is required to be able to do the following things:

- a. Organizing counseling and other activities to assist the individual in adapting and formulating problems.
- b. Assisting the school staff to carry out their daily duties associated with the extension.
- c. Formulate and interpret the data through guidance services in schools.

The performance counseling teacher/school counselor is the way, the behavior, and the ability to work, giving the clinic aims to help people recognize the current condition, problems faced and determine a way out to overcome these problems in an institution teaching and learning process.

Lack of understanding of the general public must be answered by the counselor steadily. The counselor should make it into a challenge to be faced. The counselor must demonstrate a high performance-related profession. Therefore, to see how well a counselor who served in schools, thus the authors did a mini-research with the title Counselors Performance at SMPN 49 Jakarta Timur.

As for the formulation of the problem in this research is how the performance of counselors who served in SMPN 49 Jakarta Timur?

Performance is the results achieved from work conducted counseling teachers/counselor through the ability to perform the task as educators to achieve the goals set.

The purpose of this study was to determine the performance of counselors at SMPN 49 Jakarta Timur.

The benefits of the research to be achieved from this research are.

1. Theoretical benefits

Provide information for the development of the management model BK, mainly on organizational behavior in educational institutions.

2. Practical benefits

- a. For the counseling teacher/counselor in self-development, it is important to know because the entire cause and solution improve performance counseling teacher/counselor can improve the quality of competence.

- b. For principals as decision-making authority, the results of this study are expected to be used as an input in policymaking, especially related to the performance counseling teacher/counselor.
- c. For stakeholders and relevant parties, including the department of education, the study is expected to be a consideration in the decision making concerning all matters relating to the performance of performance counseling teachers/counselor.
- d. For other researchers, the results of this research can be developed with all the different variables.

This study consisted of stakeholder perceptions of the performance of school counseling teacher/counselor consisting of principals, students, and colleagues.

## METHODS

The research method is a way to find, develop, and test the correctness of knowledge to solve a problem using the scientific method.

### *Types of research*

Based on the background of the problem and problem definition and research purposes as described earlier, then this study was classified in descriptive research.

### *Research subject*

Subjects in this study were a principal, four counseling teachers/school counselors, and 30 students in SMP 49 Jakarta Timur in the academic year 2018/2019.

### *Types and Sources of Data*

#### a. Data types

Data used in this study is the interval, i.e., there is the percentage of respondents who will be grouped based on certain levels, where each level has the interval (distance).

#### b. Data source

According to Arikunto (2002: 102), the source of data is the source from which the data was obtained. Sources of data in this study are the result of filling the questionnaire from the principal, four counseling teachers/school counselors, and students at SMP 49 Jakarta Timur 2018/2019 school year.

### *Data collection technique*

According to Ridwan (2007: 69), the data collection technique is how or techniques that can be used by researchers to collect data. The data collection tool was **a questionnaire**. According to Ridwan (2007: 71), the questionnaire is a list of questions provided to others to respond following the user's request. According to Joseph (2005: 252), the questionnaire is a series of questions related to the topic given to a group of individuals to obtain data.

The questionnaire used in this study is a questionnaire performance. Alternative answers on the questionnaire are always, usually, often, sometimes, rarely. This instrument is directly given to the subject of research. The nature of the scores given statements and can be seen in the following statement:

### Respondents answer Score

Respondents score given for each statement:



Statements	Possitive	Negative
Always	5	1
General	4	2
Usually	3	3
Sometimes	2	4
Rarely	1	5

### *Data analysis technique*

After all the necessary data is obtained, the next step is to analyze the data so it can be interpreted. Steps as follows:

1. Processing data using excel formula that found the number and percentage
2. The results are set forth in table form and then read and construed and interpreted. The data is interpreted into several categories based on modifications to the ideal score and the division proposed by Azwar (2004: 109). More details can be seen from the following table:

Classification Level Answers	
Level	Classification
142-170	Very good
113-141	Well
84-112	Pretty good
55-83	Not good
> 54	Very less

## **RESULT**

### *Counselors Performance Appraisal of Individual Counselors*

Based on the results of the processing of data about the performance assessment counselor about themselves obtained as follows:

#### Performance Assessment by counselor Individual Counselors

Results 1 Indicates that performance appraisal SMP 49 Jakarta counselor at East in the very good category, giving 145 votes from the counselor.

#### *Performance Assessment of Peer Peer Counselors (1)*

#### Performance Assessment Peer Counselor of Counselors Friend

Outcome 2 Demonstrate that performance appraisal counselor in East Jakarta SMP 49 in both categories, giving 115 votes from colleagues.

### *Performance Assessment Counselor of Headmaster*

The results show that the performance assessment of SMP 49 Jakarta counselor in the East in the category Good. Because it gives the 117 votes of the principal.

### *Performance Assessment Counselor of student*

#### Results Performance Assessment of Student Counselors

Respondents	Appraisal	Total Category
1	145	Very good
2	130	Well
3	125	Well
4	115	Well
5	117	Well
6	128	Well
7	160	Very good
8	139	Well
9	132	Well
10	125	Well
11	119	Well
12	125	Well
13	134	Well
14	149	Very good
15	138	Well
16	122	Well
17	124	Well
18	131	Well
19	139	Well
20	155	Very good
21	130	Well
22	118	Well
23	119	Well
24	140	Well
25	135	Well
26	127	Well
27	133	Well
28	163	Very good
29	120	Well
30	123	Well
Average	132	Well

Based on the results of 4 can be seen that the overall performance of students in SMP 49 Jakarta counselor belongs to either category.

## CONCLUSIONS

The result shows the performance of guidance and counseling teachers/counselors in the judgment of principals to be in both categories. Furthermore, according to the counselor's performance assessment are in the very good category. The peer and the students give the ratings. The average score for the whole category is 127, 25, which indicates a Good rating. Therefore, it is very important to provide external counselors to improve the assessment. It will support the achievement of an optimal education.

## REFERENCES

- Achmad S. Ruky, 2004. Performance Management System, third printing, Jakarta: PT. Gramedia Pustaka Utama.
- True amber Sulistyani. 2003. Management and HR. Concept Theory and Development in the Context of Public Organization. Yogyakarta: Graha Science.
- Joseph A. Muri. 2005. Research Methodology. Padang: UNP Press.
- Anwar King Mangkunegara. 2000. Human Resource Management Company, 2nd mold Bandung: PT. Youth Rosdakarya
- Arikunto, S.2002. The research methodology An Approach Proposal. Jakarta: PT. Rineke Notices
- Anwar, Saifuddin. 2004. Methods. Yogyakarta: Student Library.
- Baharuddin. 2008. Teaching and Learning Theory. Yogyakarta: Ar-Ruzz Media
- Gibson, RL & Mitchell, MH 1987. Introduction to Guidance. New York: Macmillan Publishers
- Hasibuan, Malay. 2001. Human Resource Management: The Basics, Understanding and Issues. Jakarta: PT. Toko Gunung Agung.
- Mink. 1993. Human Resource Management Series (Performance / Performance). Jakarta: PT. Elexmedia Komputindo.
- Riduwan. 2007. Learning Easy To Teacher-employee research and researchers Starter. Bandung: Alfabeta
- Sofo, Francesco. 1999. Human Resource Development, Perspective, Roles and Practice Choice, Business and Professional Publishing, warried, NWS.
- Sukardi, god, K. 1983. The basics of guidance and counseling in schools. Surabaya: National Business
- Supardi. 2013. Application of statistical research more comprehensive statistical concepts. Jakarta: Change Publication.
- System, Issue 1 Molds 1, Jakarta: PT. King Grafindo Persada.
- Usman, Hasaini.2010. Management (theory, practice and research education). Jakarta: Earth Literacy
- Wungu, Jiwo, Hartanto Brotoharsojo. 2003. Increase your company's performance Merit National Education Minister Regulation number 27 yr 2008

# Web Application Based on Analytic Approach to Assessing Workplace Bullying Behaviours

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## Abstract

The principle of Analytic Network Process (ANP) has examined and forecast bullying behaviors in the workplace according to 83 employees' perceptions based on gender. The study aimed to examine the novelty in the development of expert system-based psychological measurements of workplace bullying in gender perspective through the ANP approach. The research was done using qualitative methods through in-depth interviews with psychologists, as well as a focus group discussion of male and female employees to obtain an overview of gender perceptions and factors in the occurrence of workplace bullying behaviors. The data were distributed to a web application-based expert system equipped with a psycho-education module about workplace bullying behavior. The result shows ( $r = 0.616$ , probability level ( $p$ ) = 0,000 and  $R^2 = 0.380$ ). It means gender has a significant influence on workplace bullying behavior (38%). This application could predict the level of bullying behaviors in the workplace higher on the woman and the factors that influenced it.

**Keywords:** *Analytic network process, expert system, web, workplace bullying's scale*

## INTRODUCTION

Bullying in workplaces is a problem thought to harm individual productivity. It was investigated whether being exposed to bullying in the workplace increases long-term sickness absence (Eriksen et al, 2016). If the impact of bullying leads to severe health problems such as depression, there was a possibility that individuals could suffer long-term illness (Duru, et al, 2018). Bullying involved negative behaviors and caused some damage to intimidated targets (Saunders, et al, 2007). Ranging from covert, cynical comments, to aggressive ones such as throwing items or physical threats, being bullied by superiors or colleagues, physical and psychological symptoms appear including stress and anxiety about work, depression, loss of self-confidence, decreased job satisfaction and decreased organizational commitment. Gender has an important interaction effect on the assessment of workplace bullying perceptions (Eriksen et al, 2016; Saunders, et al, 2007; Bentley et al, 2012). The research on bullying is important to know, so organizations could handle it well, through psycho-education could preventive actions. Such by made a module on introduction and prevention of bullying, as well as measuring workplace bullying behaviors.

One of findings about African-American tribal women who lack protection from bullying in the workplace through social support from colleagues (Attell et al, 2017). Young individuals, divorced, faculty members, and have chronic diseases were found to have high perceptions of bullying in the workplace and have an impact on increasing anxiety, depression, negative self-

image, and hostility (Duru et al, 2018). Oppression in cyberspace or cyber-bullying in the workplace was found as a phenomenon that developed with fatal consequences, ranging from causing employee mental tension and low job satisfaction, to hostile organizational climate (Zhang and Leidner, 2018). The perpetrators of cyber-bullying in the workplace justified their bullying behavior and the results of cyber communication feature apparently influenced cyber-bullying behavior in the workplace.

Many organizations adopt an approach that could not be used to assess the status of bullying actors or targets, and the risk level of bullying behaviors quantitatively, which could be seen directly from the measurement resulted to assist the decision of human resource management (HRM) such as offered by web applications easiness (Niehause, 1995). The Analytic Network Process (ANP) method can handle inter-dependencies in a cluster and between various clusters. The ANP method stores the core concepts of the AHP method, which divided the decision system into a hierarchical structure, and believes that criteria at a lower level are dominated by higher level criteria that are close together (Sun et al, 2018). The ANP method has been used in previous research to assist in HR decisions, such as measurement of organizational citizenship behavior (Arda et al, 2017), work safety assessment Sun et al, 2018, and Kabak's research used the ANP method in expert system for employee selection (Nguyen et al, 2017).

## **METHODS**

### **ANP Approach**

The used of ANP in new domains in developing country contexts was useful for research and practice of decision support systems (DSS). The novelty of this research stems from its methodological accuracy, which enables triangulation by combining qualitative research with ANP methodology (Arda et al, 2017) through assessments in depth interview and used of group discussions that allowed researchers to understand the concept of bullying in the workplace, as well as the motives of bullying behaviour. This is a combination of theoretical approaches with actual measurement values through used of ANP, and resulting a model of workplace bullying measurement that could be used in further research, as well as in practice because it has been presented used an expert system in the form of web application contained introduction and bullying prevention.

### **Definition and Dimensions of Workplace Bullying**

Bullying in the workplace is about repetitive actions and practices directed at one or more workers, which are unwanted by the victim, which may be carried out intentionally or unconsciously, but clearly causes insults, violations and distress, can disrupt performance, and cause the work environment becomes unpleasant (Einarsen et al, 2010). Components used by researchers and practice include the occurrence of hazardous and negative work behaviors commonly. In addition, the definition of layman often includes the theme of justice and respect. One common feature for all definitions of workplace bullying is a negative verbal experience or non-verbal behavior (Saunders et al, 2007).

Rayner and Hoel have classified workplace bullying behaviour in the following forms (Cowie et al, 2002):

- a. Threats to professional status, such as public humiliation, are blamed for lack of effort.
- b. Personal threats, such as giving names of insulting, intimidating and demeaning people because of their age.

- c. Isolating, such as preventing employees from accessing opportunities, isolating physically and socially and holding back information.
- d. Excessive workloads, such as continuous pressure, deadlines that cannot be fulfilled.
- e. Actions that cause instability, such as providing useless tasks, removing responsibilities, recalling mistakes and preparing to fail.

### Development of ANP Model

The domain of knowledge about workplace bullying was collected from four employees representatives used qualitative techniques, then the findings were analyzed and compiled in the model use ANP, which is an influential tool for solving complex decision problems (Arda et al, 2017). Because of complex and interdependent nature, interactions between people derived from contextual arrangements and assignments cannot be explained by hierarchical structures. Because all the alternatives in this model were related, the weights that determined the linkages between all the components need to be calculated. Thus, the ANP method was used for settings based on the same paired comparison. In this sense, complicated analysis must be carried out to identify rankings in terms of the importance of perceptions of workplace bullying (WB). Figure 1 illustrated the steps of research methodology adopted in this study.

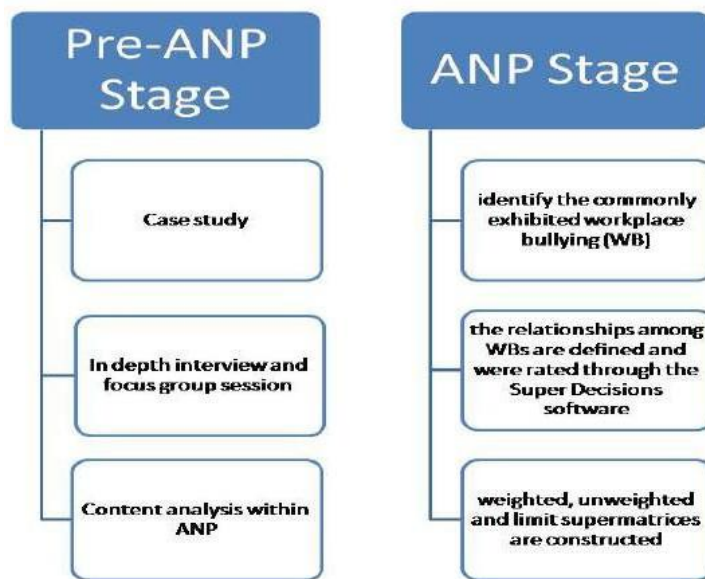


Figure. 1. Steps of ANP

### Data Analysis

Data analysis in this study begins with the ANP approach in the assessment of interview transcripts. The results obtained were included as knowledge experts in web application as a basis for rules predicting gender perceptions of workplace bullying through forecasting WBs dimensions, as well as factors of age and working years. Researchers made expert system used the forward chaining method. There were 83 subjects who participate.

## RESULTS

### Reliability Test and Validity

Tryout were conducted on 39 items of the workplace bullying scale, the results were 29 items that were declared valid and as many as 10 items were eliminated. Based on the results of reliability test with Cronbach alpha, the reliability coefficient was 0.909. This showed that measurement tool can be used to measure bullying behaviour in the workplace.

### Data Result

**Table 1. Workplace Bullying Categorization**

<b>Categorization</b>	<b>Interval Score</b>	<b>Frequency</b>	<b>Percentage</b>
Low	$X < 74$	13	15,7 %
Medium	$74 \leq X < 94$	57	68,6 %
High	$X \geq 94$	13	15,7 %
		<b>83</b>	<b>100%</b>

From data above, it showed workplace bullying behaviour in medium category. The result of correlation coefficient analysis between gender and workplace bullying behaviour of 83 employees with the product moment method from Pearson used SPSS 17.00 obtained a value of  $(r) = 0.616$  , probability level  $(p) = 0,000$  ( $p < 0.01$  ) and  $R^2 = 0.380$ . It means gender has significance influence toward workplace bullying behaviour as 38%.

### Workplace Bullying Indicators

Using the focus group sessions and a contents analysis, a set of fifteen WBs were derived, in addition to the five WBs that were drawn earlier from a thorough review of the literature. These fifteen new indicators of behaviours are particularly useful for understanding the motives and intentions behind the existing WBs. A brief explanation of each of these new OCBs is given below: public humiliation, blame for lack of effort, give the name of a tease, insulting, intimidate, degrading someone because of his age, prevent employees from accessing opportunities, isolating physically, socially isolated, withholding information, continuous pressure, deadlines that cannot be fulfilled, provide useless tasks, elimination of responsibility, and recalling errors.

### Web Application

The following explained the program design using expert system that is applied in programming.

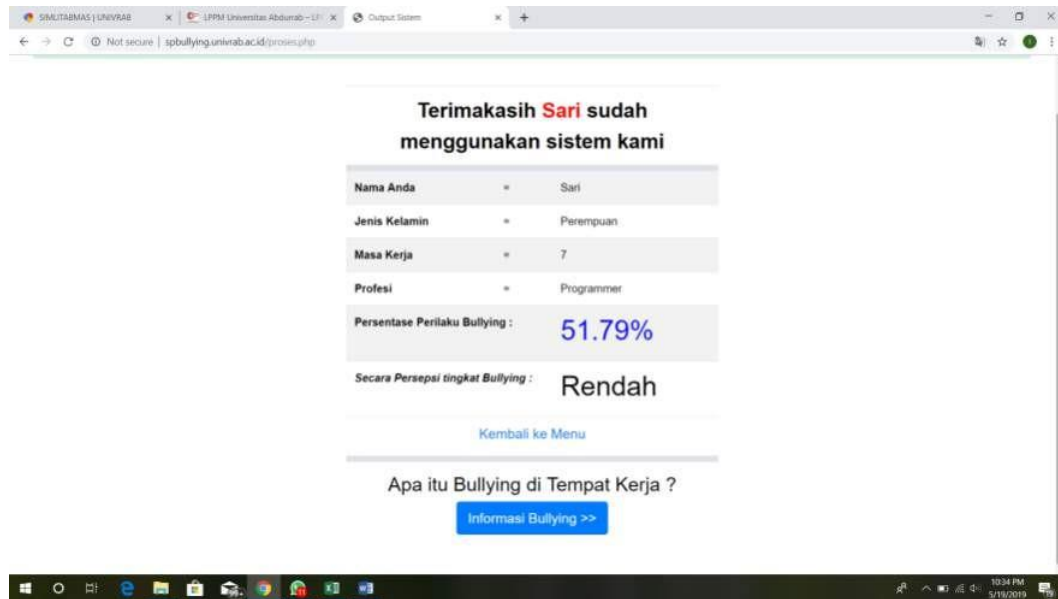


Figure. 2. Interface

## WBs Forecasting

Assessment using a portal or website address is <http://spbullying.univrab.ac.id/> . This application make easy to monitor result of gender perception and measurement level of workplace bullying.



Figure. 3. Expert System Result

## CONCLUSION

Gender has an influence on workplace bullying behaviors. The result showed that women are more involved in workplace bullying behaviors. Female bullied workers have doubled absences compared to female co-workers who do not experience bullying (Erisken et al, 2016)



because men and women have coping strategies toward problem solving in different ways. The goal of bullying most often occurred in gender discrimination, sexual and racial abuse (Saunders et al, 2007), while the impact of bullying is more severe on female employees (Atell et al, 2018). Staff training in handling difficult customers, withdrawal procedures from risky situations, and access to counseling or debriefing could help to control all this risk.

## REFERENCES

- Arda, O. A., D. Delen, E. Tatoglu, and S. Zaim. 2017. "An analytic approach to assessing organizational citizenship behavior," *Decis. Support Syst.*, vol. 103, pp. 9–23.
- Attell, B. K., K. K. Brown, and L. A. Treiber. 2017. "Workplace bullying, perceived job stressors, and psychological distress: Gender and race differences in the stress process," *Soc. Sci. Res.*, vol. 65, pp. 210–221.
- Bentley et al T. A., "Perceptions of workplace bullying in the New Zealand travel industry : Prevalence and management strategies," *Tour. Manag.*, vol. 33, no. 2, pp. 351–360, 2012.
- Cowie, H., P. Naylor, I. Rivers, P. K. Smith, and B. Pereira. 2002. "Measuring workplace bullying," *Aggress. Violent Behav.*, vol. 7, no. 1, pp. 33–51.
- Duru, P. M. E. Ocaktan, Ü. Çelen, and Ö. Örsal. 2018 "The Effect of Workplace Bullying Perception on Psychological Symptoms: A Structural Equation Approach," *Saf. Health Work*, vol. 9, no. 2, pp. 210–215.
- Einarsen, S., H. Hoel, D. Zapf, and C. Cooper. 2010 *Bullying and harassment in the workplace: Developments in theory, research, and practice*. CRC Press.
- Eriksen, T. L. Mundbjerg, A. Hogh, and Å. M. Hansen. 2016. "Long-term consequences of workplace bullying on sickness absence," *Labour Econ.*, vol. 43, pp. 129–150.
- Nguyen, J., G. Sánchez-Hernández, A. Armisen, N. Agell, X. Rovira, and C. Angulo. 2017. "A linguistic multi-criteria decision-aiding system to support university career services," *Appl. Soft Comput. J.*.
- Niehaus, R. J. J. 1995. "Evolution of the strategy and structure of a human resource planning DSS application," *Decis. Support Syst.*, vol. 14, no. 3, pp. 187–204.
- Saunders, P., A. Huynh, and J. Goodman-delahunty. 2007 "Defining workplace bullying behaviour professional lay definitions of workplace bullying," vol. 30, pp. 340–354.
- Sun, Z. Y., J. L. Zhou, and L. F. Gan. 2018. "Safety assessment in oil drilling work system based on empirical study and Analytic Network Process," *Saf. Sci.*, vol. 105, no. December 2017, pp. 86–97.
- Zhang, S., and D. Leidner. 2018. "From improper to acceptable: How perpetrators neutralize workplace bullying behaviors in the cyber world," *Inf. Manag.*

# Via DREEM, Dream of Medical Students Come True

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## Abstract

It's important to assess the educational environment regularly because of its impact on the students' outcomes. It is a descriptive cross-sectional study to evaluate students' perception of the learning environment among undergraduate students in the Faculty of Medicine, University of Andalas (FMUA) by using Dundee Ready Educational Environment Measure (DREEM). Total of 403 students from 1st till 7th semester has participated in this study. The interpretation of the overall DREEM score in each batch was more positive and negative. The subscales of DREEM (students' perception of learning, students' perception of teachers, students' academic self-perception, students' perception of atmosphere, students' social-self-perception) were perceived good. Both genders perceive the learning environment as more positive than negative. The finding was similar to finding in the teacher-centered curriculum while FMUA applied a student-centered curriculum. It could be affected by the study's limitations. Thus, the faculty needs to evaluate the learning process and adjust the environment to suit the curriculum.

**Keywords:** *Dundee Ready Educational Environment Measure, educational environment, students' perception*

## INTRODUCTION

The educational environment is defined as everything that happens in the educational institution, which includes the educational, physical, social, and psychological context in which students are immersed (McALeer and Roff, 2001; Kennedy, 2013). It's important to assess regularly because of its impact on the students' outcomes (Bakhshialiabad, et al, 2015). The previous studies conclude that students who perceive the educational climate favorably achieve higher academic success than those who perceive it negatively (Hamid, et al, 2013; Genn, 2001). A study from Ahmed et al., shows a relationship between students' perceptions of their educational environment and their academic performance as measured by CGPA (Ahmed, 2018). A previous study in Indonesia stated that the education environment was related to the clinical skill of students, especially the atmosphere of education environment had a significant relation with the OSCE results (Megawati et al, 2017). Continuous assessment of the educational environment of medical schools is needed to monitor changes after specific education interventions being applied in a system (Hongkan et al, 2018).

The education environment in a health professional institution needs to be evaluated by using a wide-ranging, valid, and reliable tool.<sup>6</sup> The most common tool being used is almost certainly the Dundee Ready Education Environment Measure (DREEM) (Al-Hazimi, et al, 2004). It was already validated and used as an international tool that provides help to measure the overall

state of affairs in the education environment of medical faculties, also has been translated into several languages, including Indonesian (Roof, 2005).

The objective of this study was to assess the students' perception toward their educational environment in undergraduate programs Faculty of Medicine, University of Andalas, and identified the concern in their education circumstances.

## METHODS

### *Design and participants*

This study was a descriptive, cross-sectional study. The sample consisted of all undergraduate students (1st, 3rd, 5th, and 7th semester) studying at the Faculty of Medicine, University of Andalas. Samples were selected by non-probability sampling, and all students were invited in this study to represent each academic level. A total of 403 students have participated in this study. Students did not participate due to personal reasons, and some incomplete questioners also excluded.

### *Study instrument and procedure*

The Indonesian-translated Dundee Ready Education Environment Measure (DREEM) was used in this study. It consists of 50 statements relevant to the educational environment, with 5 subscales: (1) students; perception of learning (SPL)-12 items; (2) students' perception of teachers (SPT)-11 items; (3) students' academic self-perception (SASP)-8 items; (4) students' perception of the atmosphere (SPA)-12 items; (5) students' social self-perception (SSSP)-7 items. It scored on five points Likert scale ranging from zero to five. The interpretation of DREEM overall score was using the guide developed by McAleer and Roff, which defines a score of 0-50 as 'very poor', 51-100 as indicating 'plenty of problems', 101-150 as being 'more positive than negative' and 151-200 as 'excellent'. Each subscale also has their interpretation, which is mentioned in Table 1 (Ahmed et al, 2018; Shafira, 2017; Mustaq et al, 2017).

**Table 1. The interpretation of DREEM Subscales**

Category	Value
students; perception of learning (SPL)	
Very poor	0-12
Teacher is viewed negatively	13-24
A more positive approach	25-36
Teaching highly thought of	37-48
students' perception of teachers (SPT)	
Abysmal	0-11
In need of some retaining	12-22
Moving in the right direction	23-33
Model teachers	34-44
students' academic self-perception (SASP)	
Feeling of total failure	0-9
Many negative aspects	10-16
Feeling more on the positive side	17-24
Confident	25-32
students' perception of the atmosphere (SPA)	
Horrible environment	0-12
Many issues which need changing	13-24
A more positive attitude	25-36
A good feeling overall	37-48
students' social self-perception (SSSP)	
Miserable	0-7
Not a nice place	8-14

Not too bad	15-21
Very good socially	22-28

### Data analysis

The data were analyzed descriptively to assess the students' perception of their learning environment. The students' perception was differed depend on genders and grades after being assessed generally as the students of the Faculty of Medicine, University of Andalas. The students' perception was also being assessed per subscale to look after the problem in each aspect that influences the students' perception (SPL, SPT, SASP, SPA, and SSSP). Results were described in the form of mean values of the total scales, subscales or items, and the maximum score percentage in each category (Palmgren et al, 2014; Swift et al, 2013).

## RESULTS

The respondents were: 46 (11%) students of the seventh semester, 151 (37%) students if the fifth semester 43 (11%) students of the third semester, and 163 (40%) students of the first semester. Table 2 shows the characteristic of students in this study.

**Table 2. Characteristics of the respondents**

Characteristic	Number	(%)
Semester of study/Academic Level		
1 <sup>st</sup> semester	46	11%
3 <sup>rd</sup> semester	151	37%
5 <sup>th</sup> semester	43	11%
7 <sup>th</sup> semester	163	40%
Gender		
Male	118	29,3%
Female	285	70,7%

The overall DREEM score in 1st, 3rd, 5th, and 7th semester are 136/200, 133/200, 133/200, and 135/200, respectively. The average DREEM score for pre-clinical students in this study is 134. This result indicates that the students in FMUA perceive their educational environment is more positive than negative.

**Table 3. The DREEM domains in each academic level**

Subscale	1 <sup>st</sup> semester (SD)	3 <sup>rd</sup> semester (SD)	5 <sup>th</sup> semester (SD)	7 <sup>th</sup> semester (SD)
<b>SPL</b>	34	34	34	33
<b>SPT</b>	30	29	28	28
<b>SASP</b>	22	21	21	21
<b>SPA</b>	32	32	33	32
<b>SSSP</b>	19	17	19	18
<b>Overall</b>	137	133	135	134

*SPL=students' perception of learning; SPT=students' perception of teachers; SASP=students' academic self-perception; SPA=students' perception of atmosphere; SSSP=students' social-self perception; SD=standard deviation.*

The students' perceptions of the learning environment from each batch were similar, which was more positive than negative. Also, the subscales in each batch had a similar result. Even though not in the best, but every subscale concluded a good perception in each batch.

**Table 4. The DREEM domains with total and individual scores mean scores and interpretations**

Subscale	Mean	SD	Maximum score of perception (%)	Interpretation by students' perception
<b>SPL</b>	34	0.50	70.31	Positive
<b>SPT</b>	29	0.96	65.34	Good
<b>SASP</b>	21	0.50	66.41	Positive
<b>SPA</b>	32	0.50	67.19	Positive
<b>SSSP</b>	18	0.96	64.28	Good enough
<b>Overall</b>	134	6.29	67.13	More positive than negative

*SPL=students' perception of learning; SPT=students' perception of teachers; SASP=students' academic self-perception; SPA=students' perception of atmosphere; SSSP=students' social-self perception; SD=standard deviation.*

Table 4 shows the assessment of subscales in DREEM. The highest score was described in Students' perception of learning, more than 70%, while other subscale got a score of around 60% from the maximum score. However, those results didn't affect the results that every subscale was interpreted as a good one.

**Table 5. Total and subscale mean (SD) scores according to gender**

Subscale	Males (n=118)	Females (n=285)
<b>SPL</b>	33 (3)	33(3)
<b>SPT</b>	29 (3)	29 (3)
<b>SASP</b>	23 (3)	23 (3)
<b>SPA</b>	28 (2)	32 (3)
<b>SSSP</b>	19 (3)	19 (3)
<b>Overall</b>	134 (17)	135 (14)

*SPL=students' perception of learning; SPT=students' perception of teachers; SASP=students' academic self-perception; SPA=students' perception of atmosphere; SSSP=students' social-self perception; SD=standard deviation.*

Both genders in FMUA perceive the learning environment similarly. Simply, both males and females had a good perception of their learning environment. According to the result in Table 5, the results in every scale were the same except one, Students' Perception of Atmosphere. Female thought higher of their learning atmosphere compared with male. But, the result was still interpreted the same as 'a more positive attitude'.

## DISCUSSION

Previous studies reported that the students' perception toward their education environment was 'more positive than negative', with a small proportion of students perceive 'excellent' or 'poor' (Sahfira, 2017; Musta et al, 2017; Brown et al, 2011; Condon et al, 2017; Cocksedge and Taylor, 2013; Varma et al, 2005). Those support the result in this study. The studies conducted in the UK, KSA, and Pakistan showed a higher score with the students regarding their environment as excellence with the application of the student-centered curriculum (Palmgren and Chandratilake, 2011; Sayed and El-Sayed, 2012; Khan et al, 2011; Varma et al, 2005). It should

be noted from those studies that high-scoring institutes had a student-centered curriculum (Palmgren and Chandratilake, 2011; Sayed and El-Sayed, 2012). Meanwhile, the teacher-centered curriculum reported an almost similar result (Masood et al, 2013; Al-Kabba, 2012; Kohli and Dhaliwal, 2013; Khursheed and Baig, 2014; Whittle et al, 2007). In contrary to that statement, the FMUA already applied problem-based learning as a form of the student-centered curriculum since 2004. However, the perception of the students was equal to students who came from the teacher-centered curriculum. It possible that the faculty need to evaluate the learning process and adjust the environment to suit the curriculum. A study mentioned that the problem could arise if the students weren't motivated, independent, and active enough. Thus, the student-centered curriculum wasn't run well and likely turned into teacher-centered (Shafira, 2017). The total score for every subscale of DREEM showed a higher score compare with studies conducted in Pakistan (Mustaq el al, 2017) and India (Sajid et al, 2013; Nadeem et al, 2014) also neighborhood country, Malaysia (Arzuman, et al, 2010). It justifiable to conclude that students of FMUA perceive that their learning environment better, although the interpretation of the results was the same, which was good.

The DREEM score for males and females in this study was 134 and 135, respectively. They had a similar perception of the learning environment. A study in the UK showed a significant difference in scores between male and female students. The total mean score was 123 for males and 126 for females ( $p < 0.05$ ), and females scored higher in five subscales than males. The result was significantly different in the perception of teachers and the perception of the atmosphere ( $p < 0.05$ ) (Arzuman et al, 2010) This study shows that the students perceive the learning environment similarly despite the length of study. Those finding was contradicted the result of Ahmed et al. study, which suggests that attitudes toward the learning environment differ according to the student's year of study (Ahmed et al, 2018).

This study was limited by the number of students who took part in the study. Thus, the result could be biased by the number. Also, further study is needed to analyze the significance of each factor in students' perceptions.

## CONCLUSIONS

This study described the students' perception of learning style in FMUA by using DREEM from every academic level in the undergraduate degree, exclude the clinical students. The students' perception was good, and they perceive the learning environment more positive. That fact spared an opportunity to faculty staff to improve the learning environment, aimed for the best environment. The assessment should be done regularly, knowing the fact that the participation was low at a certain academic level; the staff should encourage the students to participate in this study. The aim is to get more objective and representative results. The clinical students also need to be included in a similar study because the academic and clinical environment is different for students. The faculty should improve the clinical environment too. An objective result of students' perception of their learning environment will help the faculty serve the best environment for students to learn. Finally, the goal is to help the students improve their academic performance and personal growth, result in several good and successful doctors.

## REFERENCES

- Ahmed Y, Taha MH, Alneel S, Gaffar AM. Students' perception of the learning environment and its relation to their study year and performance in Sudan. *Int J Med Educ.* 2018;9:145-50.

- Al-Kabbaa AF, Ahmad HH, Saeed AA, Abdalla AM, Mustafa AA. Perception of the learning environment by students in a new medical school in Saudi Arabia: Area of concern. *J Taibah Univ Med Sci*. 2012;7(2):69-75.
- Al-Hazimi A, Zaini R, Al-Hyiani A, Hassan N, Gunaid A, Ponnampuruma G, et.al. Educational environment in traditional and innovative medical schools: a study in four undergraduate medical schools. *Educ th (Abingdon)*. 2004;17:192-203.
- Arzuman H, Yusoff MSB, Chit SP. Big Sib students' perception of the educational environment at the school of medical sciences, Universiti Sains Malaysia, using Dundee Ready Educational Environment Measure (DREEM) Inventory. *Malaysian J Med Sci*. 2010; 17(3): 40-47.
- Bakhshialiabad H, Bakhshi M, Hassanshahi G. Students' perceptions of the academic learning environment in seven medical sciences courses based on DREEM. *Adv Med Educ Pract*. 2015;6:195–203.
- Brown T, Williams B, Lynch M. The Australian DREEM: evaluating students' perceptions of academic learning environments within eight health science courses. *Int J Med Educ*. 2011;2:94–101.
- Cocksedge ST, Taylor DCM. The National student survey: is it just a bad DREEM? *Med Teach*. 2013;35(12):1638-1643.
- Condon BP, Worley PS, Condon JR, Prideaux DJ. Student academic performance in rural clinical schools: The impact of cohort size and competition. *Med Teach*. 2017; 39(3):262-268.
- Genn JM. AMEE Medical Education Guide No. 23 (Part 2): Curriculum, environment, climate, quality, and change in medical education – a unifying perspective. *Med Teach*. 2001;23:445–454.
- Hamid B, Faroukh A, Mohammadhosein B. Nursing students' perceptions of their educational environment based on DREEM Model in an Iranian university. *Malaysian J Med Sci*. 2013;20:56–63.
- Hongkan W, Arora R, Muenpa R, Chamnan P. Perception of educational environment among medical students in Thailand. *Int J Med Educ*. 2018;9:18-23.
- Kennedy C, Lilley P, Kiss L, Littvay L, Harden RM. Curriculum Trends in Medical Education in Europe in the 21st Century. Association for Medical Education in Europe Conference. 2013 [cited 20 March 2019]; Available from: [http://www.medine2.com/Public/docs/outputs/wp5/DV5.18.1\\_CURRICULUM\\_TRENDS\\_FINAL\\_REPORT.pdf](http://www.medine2.com/Public/docs/outputs/wp5/DV5.18.1_CURRICULUM_TRENDS_FINAL_REPORT.pdf).
- Khan JS, Tabasum S, Yousafzai UK, Mukhtar OS. Measuring the medical education environment in Undergraduate medical colleges across Punjab, Pakistan. *Biomedica*. 2011;27(1):14-18.
- Khursheed I, Baig L. Student's perceptions of the educational environment of a private medical school in Pakistan. *J Pak Med Assoc*. 2014; 64(11):1244-9.
- Kohli V, Dhaliwal U. Medical Student's perception of the educational environment in a medical college in India: a cross-sectional study using Dundee ready education environment questionnaire. *J Educ Eval Health Prof*. 2013;10:5.
- Masood J, Raheel S, Ahmed F, Ayaz H. Student's perception of the educational environment at the Public sector Medical University of Pakistan. *J Res Med Sci*. 2013;18(5):417-21.
- McAleer S, Roff S. What is educational climate? *Med Teach*. 2001;23:333-4.
- Megawati YS, Hartono, Randhita ABT. Medical student adaption: How the correlation between self-efficacy and educational environment toward Score of Objective Structured Clinical Examination (OSCE). *Nexus Pendidikan Kedokteran & Kesehatan*. 2017;6(1):46-58.

- Mustaq R, Ansar A, Bibi A, Ramzan M, Munir A, Zaheer A, Aslam A, Ahmad A, Barlas A. Quality of the educational environment at Wah Medical College: Assessment by using Dundee Ready Educational Environment Measure. *J Ayub Med Coll Abbottabad*. 2017;29(3):441-444.
- Nadeem A, Iqbal N, Yousaf A, Daud MA, Younis A. Students' perception of the educational environment at Army Medical College, Rawalpindi: Assessment by DREEM. *Pak Armed Forces Med J*. 2014;64(2):298-303.
- Palmgren PJ, Lindsquist I, Sundberg T, Nilsson GH, Laksov KB. Exploring perceptions of the educational environment among undergraduate physiotherapy students. *Int J Med Educ*. 2014; 5:135-46.
- Palmgren PJ, Chandratilake M. Perception of educational environment among undergraduate students in a chiropractic training institution. *J Chiropr Educ* 2011; 25(2):151-63.
- Roff S. The Dundee ready educational environment measure (DREEM)--a generic instrument for measuring students' perceptions of undergraduate health professions curricula. *Med Teach*. 2005;27:322-325.
- Sajid F, Yusoff MSB, Chit SP. Perceptions of students of the Learning Environment studying an integrated medical curriculum. *J Surg Park Int*. 2013;18(2):86-91
- Sayed H, El-Sayed N. Student's perception of the educational environment of the nursing program In Faculty of Applied medical sciences at Umm-Al-Qura University, KSA. *J Am Sci*. 2012;8(14):69-75.
- Shafira NNA. Presepsi mahasiswa terhadap lingkungan pembelajaran di program studi kedokteran Fakultas Kedokteran dan Ilmu Kesehatan Universitas Jambi. *JMJ*. 2017; 5(2):137-150.
- Swift, I, Miles, S, Leinster, SJ. The analysis and reporting of the Dundee ready environment measure (DREEM): some informed guidelines for evaluators. *Creative Education*. 2013;4:340-47.
- Varma R, Tiyaagi E, Gupta JK. Determining the quality of educational climate across multiple undergraduate teaching sites using the DREEM inventory. *BMC Med Educ*. 2005;5(1):8.
- Whittle SR, Whelan B, Murdoch-Eaton DG. DREEM and beyond: Studies of the educational environment as a means for its environment. *Educ Health (Abingdon)*. 2007;20(1):7.



# Conducting Values Based Research in the Field of Leadership Based on the Naqli and Aqli Perspectives

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## **Abstract**

This article discusses some examples of value based research in leadership study that integrate both conventional and religious research approach. Leadership is not a field that needs to be investigated independently but the value of the field relies mostly on the ability of researchers to link the theoretical aspects of leadership with other related variables. Most importantly, this article also stresses that only by clearly underline the organizational or societal issues that need to be investigated and link the issues with leadership theories or concepts, a researcher will be able to highlight the importance of leadership in academic research. In sum, this article suggests three main aspects that need to be highlighted by researchers in the field of leadership. First is introducing a sustainable concept or theory of leadership and this article suggests that conventional theory of leadership needs to be integrated with religious theory of leadership. Secondly, researchers need to conduct a thorough analysis on organizations and societies in order to develop a correct theoretical concept to be used in the research. Finally, researchers should elaborate clearly the methodology applied by the research to investigate leadership – either conventional leadership, religious leadership, or the combination of both.

**Keywords:** *Leadership, Integration of Knowledge, Value-Based Research, Naqli and Aqli*

## **INTRODUCTION**

This article will discuss some examples of research in the field of leadership that integrate both conventional and religious research approach by integrating both Naqli (Revealed) and Aqli (Acquired) source of knowledge. In doing so, this article relies on the understanding of philosophy of knowledge to guide this article toward a correct understanding of doing research by using multiple sources, or in the case of this article, doing research based on the Naqli and Aqli perspectives. Some examples of research in the field of leadership, its foci, and methods will be presented later to further explain the concept or approach.

Specifically, this article will discuss the association of theory, research, and practice when investigating both conventional and Islamic leadership. Leadership is not a field that needs to be investigated independently but the value of the field relies mostly on the ability of researchers to link the theoretical aspects of leadership with other related variables. Most importantly, this article also stresses that only by clearly underline the organizational or societal issues that need to be investigated and link the issues with leadership theories or concepts, a researcher will be able to highlight the importance of leadership in academic research. The main reasons that underpin this understanding lays on the philosophy of knowledge itself that should be used to guide researchers to do their research, particularly when integrating multiple

sources of Naqli and Aqli. A good book that discuss the philosophy of knowledge from its theoretical and historical perspectives is *Tradisi Falsafah Ilmu: Penghantar Sejarah dan Falsafah Sains* by Abdul Rahman Abdullah (2002). This article would also like to suggest a good research methodology book that has strong connections with the issue of philosophy of knowledge that sometimes unintentionally ignores by higher degree candidates. This might be due to several reasons and one of the reasons should be the explosion of information that we receive from multiple sources – virtually and printed. Fail to organise the information correctly according to its philosophy of knowledge will led researchers to misuse the information. The book is *Economic and Business Research for Malaysian Students* by H.Osman Rani (2014). There are also other books available to explain the methods of integrating multiple sources in doing research, but this article sees that these two books are helpful because the authors have successfully elaborate the issue clearly both from theoretical and technical perspectives.

## METHODS

This section will discuss the conceptualization of knowledge, methods of obtaining knowledge, limitations of scientific reasoning, and finally Islamic perspectives on knowledge.

According to Abdul Rahman Abdullah (2002), the definition of knowledge or *ilm* could also be referred to the definition of science or an abstract and conceptual knowledge that explains scenarios of phenomena by using the rules of causality. Abdullah Rahman Abdullah (2002) further explains the issue by stated that knowledge or *ilm* could be divided into two categories or first ordinary knowledge and secondly scientific knowledge. Ordinary knowledge refers to knowledge on our daily routine and basic activities. If we refer to the study of sociology, ordinary knowledge is commonly associated with Common Sense knowledge (Croteau & Hoynes, 2015). The knowledge should not be considered as less importance because our common sense in its nature decides what we prefer and underlines our perceptions whether some elements, actions, values, or others correct or wrong. The second category of knowledge or *ilm* is scientific knowledge. Scientific knowledge means organized and systematic knowledge which are completed with clear methods and approaches that enable us to derive into some particular understanding or knowledge or *ilm*. The main focus of scientific knowledge is not just only to identify the scenario but also to examine its causes and related scenarios in systematic ways.

In addition to the definition of knowledge or *Ilm*, Abdul Rahman Abdullah (2002) said that the definitions have resulted two interrelated approaches of knowledge or Rationalism approach to knowledge and Empiricism approach to knowledge. Rationalism approach states that knowledge has apriorism nature which means knowledge has principles, arguments, and reasoning that might not necessarily be based on empirical experiences and observations. Meanwhile, Empiricism approach stresses on the importance of experiences and observations that are systematically analyzed to be used as the source of facts. According to Abdul Rahman Abdullah (2002) further, the two approaches and conceptualization of knowledge has one great limitation, or the approaches limit knowledge from the importance of the spiritual and metaphysical nature of human being and other creations that are importance to justify the validity of knowledge. This is importance to be stressed because, knowledge when it is only acquired through human sensory efforts, either by using Rationalism and Empiricism approach or the combination of both is not stable and consistent, thus subject to change and evolution.

In Islam, one great limitation of scientific knowledge is its separation with the source of every knowledge or the Almighty Creator, Allah swt, and only rely on the supremacy of human reasoning and understanding on facts, information, as well as phenomena or scenario in general. The approach is seen to be more individualistic in nature because the interpretation of

knowledge solely relies on the researchers' scientific reasoning. Based on this reason, the most general understanding of integrating Naqli (Revealed) and Aqli (Acquired) knowledge is to use the Naqli knowledge as the foundation of knowledge or the real knowledge and other Aqli knowledge are useful to drive us toward the reality as defined in the first place by the Naqli knowledge. This means that any Aqli knowledge that defeats the authority of Naqli knowledge is considered to be incomplete and subject to reinvestigation. Hence, the integration of Naqli and Aqli knowledge does not mean to undermine the ability of human reasoning but the approach is useful to guide human reasoning toward the true knowledge, reality, and scenario that should be achieved by mankind as specified by the Naqli sources. Quoting Abdul Rahman Abdullah (2002, p.88) who said; "Real knowledge is knowledge that produces strong faith or Iman, or the knowledge drives human toward knowing the Almighty Creator, Allah swt (Ma'rifatullah)". Finally, based on its limited capacity, this article will only try to explore the methods and approaches of integrating the Naqli and Aqli knowledge in Social Science, particularly the field of Leadership. This article will next discuss the reasons why Naqli and Aqli approach is very important to be incorporated in leadership research.

Three examples of research will be outlined by this article to visualise the issue. The research is first, "The Nature and Functions of Qalb in Leadership from the Islamic Perspective: A Preliminary Investigation of the Integration of Naqli and Aqli Knowledge-Base for Global Leaders". The second research is, "Maqāsid al-Sharīcah as the Foundation of Islamic Leadership Practices". The third research is, "Imams' Leadership, Mosque Performance, and Community Development: An Investigation on Urban and Rural Muslims' Communities in Negeri Sembilan, Selangor, and Kuala Lumpur". In addition to the researches, this article also provides two examples of survey items that have some elements of integration of Naqli and Aqli knowledge.

## RESULTS

The conventional leadership literature fails to provide any precise and exact definition of leadership. The concept remains largely "elusive and enigmatic" (Meindl et al., 1985, p. 78 in Leavy, 1996, p. 440). There is also uncertainty in categorizing leadership as either position, skill, relationship or management (Barker, 1997). The truth is, leadership literatures in general are unable to generate an understanding of leadership concept that is both intellectually compelling and emotionally satisfying (Leavy, 1996, p. 440 & 441). Even though we can see that there are multiple definitions of leadership in the literatures, it is unfortunate that each of them can only provide a sliver of insight the concept. The definitions are still remaining incomplete and wholly inadequate explanation (Bennis & Nanus, 1985, p. 4). "The words used to define leadership are contradictory, the models are discrepant, and the contents of leadership is confused with the nature of leadership" (Ross, 1991, in Barker, 1997, p. 346). Therefore, in order to provide a clear insight of the nature of leadership, Barker (1997), has provided a very substantive argument on how leadership studies can be perceived as an important knowledge. He said that leadership concept should be integrated with some other conventional knowledge. By this way, the prevailing nature of leadership and the significance of the concept can be seen.

"Leadership concept has been located as a conventional knowledge or a science with its own particular concentrations. Therefore, until today, there is no exact definition of leadership by the scholars. Thus, they must be relying on conventional knowledge to assess the validity of leadership activities" (Barker, 1997, p. 343).

Hence, guiding conventional leadership concept based on a firm, certain, and godly-purposed concept for example the *maqasid syariah* is very useful in giving us the picture of how important leadership study is. The word leadership can always be heard and its significance can always be felt. Interestingly the understanding of the concept is “very symbolic and romantic, especially when we see the concept from the perspectives of social construction” (Meindl, 1995, p. 330). For example, the concept of leadership has sometimes being associated with “position and influence which consists in it power and authority with persuasive inducements” (Jaques, 1989, p. 121). However, this is not necessarily means that leadership must only be associated with position. This is because the essence of leadership can also be seen clearly in each individual whose basically is already a leader in his own personal environment. Therefore, based on the understanding that the concept of leadership is very symbolic, the idea to explain leadership together with other conventional knowledge is very practical. This has made the process of defining leadership to be more complete, precise and clear.

This article chooses the concept of strategic leadership as an example. Strategic leadership has been seen by leadership scholars as a new form of leadership studies. “The evolution of leadership studies emerges in new form, strategic leadership” (Philips & Hunt, 1992, p. 3). There are two ways to understand the origin of strategic leadership concept. First is, it can be said that the concept emerges based on the importance of the word strategy itself. Second is, it can also be said that, knowledge on strategy emerges based on the understanding on leadership concept. The truth is, “both concept of leadership and strategy is synonymous and there is a very close link between them” (Leavy, 1996, p. 440 & 441). These two concepts are interdisciplinary in nature and it demands an integration of knowledge in analyzing them. For example, in any organization, the process of strategy formulation and strategy formation are mostly depended on the organization leaders (Mintzber, 1978, in Leavy, 1996). Leavy (1996) continued, in order to explain the difference of strategy formulation and strategy formation in organization by Mintzberg (1978), has concluded clearly that the process will somehow ended in the hand of organization leaders.

“Mintzberg made a distinction between intended or formulated strategy, and realized or formed strategy...not all strategic intentions are realized, and not all realized strategies are carefully pre-planned... When the focus is shifted from strategy formulation onto strategy formation, we find ourselves studying a process that inherently involves the dynamic interaction of leaders, organizational histories and situational context. In short, along the way we are capturing the process of top leadership in the arena, in flight” (Leavy, 1996, p. 441).

Thus, it is understandable that even though sometimes, there are strategies in organization that come from the ideas of many, the authority to authorize and accept the strategies is lay in the hand of the leaders. In this aspect, we can see that there are boundaries that separate leaders and followers. This is because, in formulating strategy, the process is depended on the organization interests, which are mostly formed by organization leaders. Moreover, if we study leadership from a bigger scale, for example the society scale, leadership strategy should covers the needs and expectations of leaders, followers, and the society. For that reason, from the example above, it is clear that to integrate the knowledge of strategy and leadership under one complete discussion is inevitable. It is also important to stress that, to integrate the study of leadership, strategy, and Islamic perspectives of strategic leaders is inevitable, particularly when investigating the scenarios of Muslims’ society today. Methods of how researchers integrate various field of studies and use Islamic revealed knowledge as its philosophy of doing research needs to be specified. In this respect, conventional inductive and deductive reasoning

of doing research could be used to help researchers investigate the identified scenarios (Abdul Rahman Abdullah, 2002; H. Osman Rani, 2004).

Researchers should bear in mind that the overall aims of doing the research is to solve identified phenomena, scenario, or problems systematically (H. Osman Rani, 2004). Researchers should also bear in mind that they need to identify the 'expected conditions or phenomena' that they hope to achieve and this should be based on their understanding about 'what Islam says on the issue?' or 'Islamic perspectives on the issue'. Moreover, not just limited to the understanding of Islam on the issue, researchers should also aware that in investigating the 'current state of conditions or scenarios', they need to highlight ways to investigate it Islamically and scientifically. This article sees that by answering all these important questions, the researchers will somehow move toward integrating the Naqli and Aqli knowledge in different facets of doing research. In sum, this article understands that the major limitation of integrating Naqli and Aqli knowledge in leadership and social science study is its utmost concentration that has been put toward human scenarios and phenomena. In this respect, this article suggests two ways that could be useful to help researchers to integrate the Naqli and Aqli knowledge. First, in the aspect of identifying the aims and objectives of the research. Researchers should identify what Islam sees about the scenario and decides the expected conditions that should be achieved by the research. This could only be done if the researchers refer to Islamic sources in defining the scenario. Secondly, the researchers could establish research tools that are based on Islam. In other words, by using Islamic sources or literature, the researchers will be able to ask the right questions on the investigated scenario. This will help researchers to identify the gaps between the 'current state of conditions' and 'expected conditions' of human being as specified by Islamic sources. Examples of research in the appendices might explain the issue further.

## DISCUSSION

Based on the above discussions, at least, there are two important elements that need to be focused by researchers when constructing a research which tries to integrate both Naqli and Aqli elements. The two elements are :

1. Consistent research endeavors
  - a. The Theory-Research Dynamic
  - b. Transparency of Methodology
  - c. Provisional Knowledge – The research has clear contribution toward the field of leadership and Islam.
2. The Research-Practice Dynamic
  - a. Theories of leadership – Islamic leadership
  - b. Measurement of Islamic Leadership
  - c. Implications of Islamic leadership research to the society
  - d. Significant applications of the research (e.g Training of future Muslim leaders, measurement of Islamic leadership)

It is important to be stressed in this article that the above two elements will hard to be integrated when the research outputs in various fields related to leadership fail to be translated into practice. This perhaps are resulted from the inability of researchers to link their research outputs into a convincing leadership research outcomes when we interpret it from the perspectives of its applications and practices. In this regard, this article needs to stress that Muslims' academia

should learn from the evolution of conventional management and social science studies that have successfully gather numerous research findings in the field and translate them into consistent management and leadership applications. This has made the conventional works to be used consistently across the globe, thus has made the theories and knowledge to be considered as universal. Islamic scholars should also do the same in their research. Nevertheless, this situation should not be interpreted too negatively based on the fact that this problem has also been faced by other scholars in different field of studies. For example, in the study of conventional leadership, multiple definitions of ‘leadership’ might signify the tense faced by scholars in the field to justify the importance of leaders in managerial settings (Yukl, 2006). Nonetheless, by taken into account guides in linking theories into practice in various areas of study, most importantly the study of sociology, humanity, and management, this article highlight several dimensions that need to be stressed by researchers to enable their research activities could be translated in practice. As explained above, the study of leadership needs to be linked with specific issues on the ground. This article selects the issue of *da’wah* process and its association with leadership effectiveness as an example. Other examples of leadership researches are attached as appendices.

Example of dimensions that should be highlighted in developing a leadership research based on Naqli and Aqli approach :

1. The Study of Islamic Leadership:
  - a. Philosophy of Islamic Leadership – Suggest a working theoretical framework of Islamic Leadership
  - b. Traits Perspective – Leaders’ Beliefs, Values, Motivation, Cognitive, Personality, Background, etc.
  - c. Behavioral Perspective – Leaders’ actions and practices, Leaders’ skills
  - d. Outputs of Islamic Leadership – Leadership performance measure / Leadership effectiveness measure
2. The Study of Da’wah and Islamic Leadership:
  - a. Philosophy of da’wah
  - b. Da’wah and leadership association
  - c. Methodologies and approaches of da’wah
  - d. Contextualization of da’wah
  - e. Approaches of religious leaders / Daie in da’wah
  - f. Daies performance / Da’wah leaders performance
3. Contextualization of da’wah and leadership – The Study of Society
  - a. Needs analysis – What do societies need from religious leaders and daies?
  - b. Scenario analysis – What are the problems face by Islamic society?
  - c. Theory and Hypotheses Development – How to solve the problems? / What are the state of conditions that need to be reach? / How?

Theory – Research – Practice Dynamic – How the contextual analysis determine suitable approaches of da’wah ? / How to train future leaders of da’wah? / Underlining strategies

## CONCLUSIONS

As explained in the introduction, this article highlights some important ways to do research in the field of conventional and Islamic leadership and methods to integrate them by using the Naqli (Revealed) and Aqli (Acquired) approach. In doing so, this article has presented a brief discussion on the philosophy of knowledge that should be used to guide researchers to understand the purpose of doing academic research. Secondly, this article summarized some important areas to conduct researches in leadership and some reasons to support the need to

integrate the Naqli and Aqli knowledge in leadership researches particularly when investigating issues surrounding Muslims' community. Finally, this article presents some important dimensions that need to be considered by researchers who wish to apply the concept of integration Naqli and Aqli knowledge. This article purposely use the issue of da'wah and leadership as an example to make bring more clarity in the discussions. Examples of other researches that have the elements of Naqli and Aqli knowledge are attached together in the appendices. In sum, this articles argues that the integration of Naqli and Aqli knowledge has been existed in the academia of Islam since the very beginning of the religion. It is importance for researchers to correctly justify the understanding or principles of Islam when investigating sociological scenario and phenomena.

In general, this research argues that the culture of world academia should be channeled toward a more stable and clear theory to explain the purpose of life, and this could only be found in the Naqli sources or the Revealed knowledge. The researchers are responsible to link the Revealed knowledge with current scenario and use it as a principle in doing researches. The acquired knowledge will has more stable basis when it is linked clearly with the Revealed knowledge and this should be supported with empirical data – as much as we can.

## REFERENCES

- Abdul Rahman Abdullah. (2002). *Tradisi Falsafah Ilmu : Penghantar Sejarah dan Falsafah Sains*. (Selangor : Pustaka Ilmi)
- Bennis, W. & Nanus, B. (1985). *Leaders: The Strategies for Taking Charge* (1st Ed.). (New York : Harper & Row Publishers).
- Barker, R. (2001). The nature of leadership, *Human Relations*, 54 (4), p. 469 – 494.
- Brian, Leavy. (1996). On Studying Leadership in the Strategy Field, *Leadership Quarterly*, 7(4), p. 435 – 454.
- Jaques, E. (1989), *Requisite Organization : The CEO's Guide to Creative Structure and Leadership*. (United States : Cason Hall and Co. Publishers).
- Jaques, E. & Clement, S. (1991). *Executive Leadership* (1st ed.). (Arlington : Cason Hall & Co. Publishers Ltd).
- H. Osman Rani. (2004). *Economic and Business Research for Malaysian Students*. (Tanjong Malim : Universiti Pendidikan Sultan Idris).
- Meindl, James, R. (1995), The Romance of Leadership as a Follower-Centric Theory : A Social Constructionist Approach, *Leadership Quarterly*, 6(3), p. 329 – 341.
- Philips, R.L. & Hunt, J.G. (1992). *Strategic Leadership : An Introduction, Strategic Leadership : A Multiorganizational-Level Perspectives*. (Westport : Quorum Books)

# The Construct Validity of the Teacher's Emotion Regulation Scale

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## Abstract

The teacher emotions can influence the effectiveness of the learning process with the students in the classroom. The research related to the violent behavior in the schools is mostly related to the emotion regulation ability of the teachers. The measurement of the teacher's emotional regulation ability is needed to determine the teacher's emotional regulation competency. The purpose of this research is to develop a scale with a psychometric test to evaluate the teacher's emotional regulation capability. The development of the teacher emotion regulation scale with regard to certain domains in managing emotions in the school. The dimensions that are evaluated in the regulation of emotions are monitoring, evaluation and modification. The subjects of the research were 102 teachers. The sampling technique used was the cluster random sampling. The samples were selected from the two sub-districts in the city of Padang. The construct process used the Confirmatory Factor Analysis (CFA) model. The results of the final selection of items are totaling the 6 items from the two aspects, namely monitoring and evaluation. The loading factor values are more than 0.50 with good reliability namely AVE = 0.544 (more than 0.50), and the composite reliability = 0.914 (more than 0.70).

**Keywords:** *Teacher Emotion Regulation Scale, construct validity, factor analysis*

## INTRODUCTION

The research on violent behavior in the schools has been widely associated with the ability to regulate emotions in teachers. One of the researches related to the violent behavior in the schools has been conducted by Sutanti (2011) who found a relationship between the ability to regulate emotions and the teacher aggression behavior. In line with this, Brackett et al (2010) and Ramdhani (2012) state that the teacher behavior such as shouting, hitting, scolding, or labeling the students shows the teacher's inability to regulate his/her emotions. The angry teachers can make the students afraid that have an impact on the decline in interest and concentration of the students in the learning participation that finally makes the learning goals not achieved (Bender, 2012). According to Fakhruddiana & Kumara (2009) the teacher factors are very influential on the students' academic and non-academic achievements. If the teacher is able to train himself to regulate his emotions, then in fact he/she will have the ability to teach more effectively (Sutton & Knight, 2006), also he/she will be better able to manage the classes, being more disciplined, and having more positive relationships with the students (Sutton, Camino & Knight, 2009). The teachers who have high emotion regulation ability are also less likely to feel fatigued/exhausted (Sutton, 2004). Meanwhile, the teachers who have low emotional regulation are associated with: (a) uncontrolled behavior, (b) not constructive, (c)



aggression behavior, (d) low pro social behavior and susceptible to the influence of negative emotions (Strongman, 2003).

The measurement of the emotion regulation is not easy, because of the wide range of the emotion regulation and the many unobservable of mental processes. The ability to regulate emotions is also referred as an individual's way of managing and expressing his/her emotions (Gross, 1999). Emotion regulation includes the ability to evaluate and change the emotional reactions to certain behavior by adjusting to the current situation (Thompson, 1994). The existing emotion regulation uses many strategies and has the clinical nature. The recent research shows many interests in measuring emotion regulation among the teachers (Purna, 2019). The research in the educational environment is triggered by the fact that there is still very little exposure on how the teachers regulate their emotions in learning. The measurement of the teacher's emotion regulation from the various domains allows the researchers to design the emotion regulation measurement tools.

According to Koole (2009) the emotion regulation occurs when the individuals have the sensitivity (emotional sensitivity) in detecting an emotion response that is felt to be unpleasant or undesirable its presence of an individual (the unwanted emotional response). The individuals must be able to monitor the presence of unwanted emotions. Including, to monitor the situation behind the occurrence of unwanted emotions, also, to monitor the characteristics of themselves (when and how the things that make him/her feel uncomfortable in the certain situations or on an emotional condition that is considered unpleasant and undesirable). The Emotional sensitivity can be concluded as an anticipation of the emotions whose presence is not desired, and this relates to the ability to regulate the individual emotions, whether it can be done immediately (in the heat of the moment) or proactively (the unwanted emotions are attempting not to be appearing/arose).

Thompson (1994) divides the emotion regulation into the three dimensions, namely monitoring, assessment/evaluation, and modification. The first dimension is monitoring, which is the ability related to how the teacher knows and feels all kinds of emotions in his/her mind, so he/she can monitor the emotions being faced. This is consistent with the views of Garber and Dodge (2004) and Kostiuk and Fouts (2002) which states that a person must be able to monitor the emotions being faced so that he/she can determine what steps will be used to face all the forms of emotions in his/her mind. The second dimension is an assessment (evaluation), which is an assessment/evaluation of the impact that results when the emotional behavior arises in the school. This is in accordance with the explanation of Thompson (1994) and Kostiuk and Fouts (2002) which states that an emotional assessment is carried out by a person for all events faced in accordance with the knowledge that he/she has and how to use that knowledge to produce what he/she hopes. The assessments are made to avoid the influences of the negative emotions that make the individuals can act outside their goals (Garber & Dodge, 2004). The third dimension is the modification, which is changing/modification emotions for the better way by changing the negative influences that enter into an impulse within him/herself and motivating the modification into the positive things in accordance with the behavior chosen. The process of modification can take the form of transferring the emotions to other forms of behavior (Thompson, 2011).

Based on some of these concepts, the aspects that will be used as the constructs to understand the emotion regulation are: monitoring the emotions, evaluating the emotions and modifying the emotions. The models are chosen to determine the teacher's ability to regulate or manage his/her emotions. A test that is intended to measure the influence and then indeed can produce an information about the regulation of emotions, it can be said to be a measuring tool that has high validity. A test that is intended to measure the regulation of emotions, but on the contrary

produces the data about personality that is said to be a measuring tool that has low validity to measure the emotion regulation even though its validity is high to measure the personality. The other side of the definition of validity is the accuracy aspect of measurement. A valid measurement tool is not only able to reveal the data correctly, but also must provide an accurate picture of the data. Accurate means that the measurement is able to provide a picture about the smallest differences between the one subject with another.

*Validitas* in *Bahasa Indonesia* comes from the word validity in English which means the extent to which a measuring instrument accurately and precisely performs its function as a measuring tool (Kline et al., 2001). A test or a measuring instrument can be said to have high validity if the device carries out its measuring function, or provides the measurable results that are in accordance with the measurement intent of the test which produces the data in accordance either with the measurement objectives. A valid measuring instrument is one that has a small error variance (because the measurement error is small) so that the resulting numbers can be trusted as "the real" numbers or the numbers that are closer to the actual situation (Azwar, 2001). In the field of psychology, the word validity or genuine are used at least in the three contexts, namely (a) research validity, (b) item validity, and (c) validity of measuring instruments or tests (the test validity). The construct validity is included in the validity of measuring instrument test or (the test validity) (Client et al., 2001). The validity of the construction aims to determine whether the score in the measuring instrument results is able to reflect the theoretical construction that underlies the preparation of the measuring instrument. This validity test is carried out by using the CFA analysis. The relationship between the factors will provide the information about the measuring instrument whether has in common with the objectives or has not. So, it can reduce the number of variables that must be handled by the researchers.

## METHOD

The development of the instrument was carried out in accordance with the arrangement of the psychological scale that is explained by Azwar (2015), namely: (1) the identification of the theory, (2) conceptualization, (3) operationalization, (4) construction, (5) content validity test, (6) the construct validity test with the Confirmatory Factor Analysis (CFA) model, (7) reliability test, and (8) the final scale arrangement. The data collection for this research was carried out by using a questionnaire (the scale of emotion regulation ability of the teachers). The subject characteristics are male (1) male and female, (2) the elementary school teachers. The method used in collecting the data in this research is the scale filling method, that is the scale of teachers' regulation. The number of samples in this research was 102 elementary school teachers in the Padang City. The sampling technique used was the cluster random sampling, which was taking the samples from the eleven sub-districts in the Padang City. The sampling is done randomly by determining the cluster (SDN), then selecting the subjects in each cluster (selected school) which is carried out randomly. This is done to provide the equal opportunities for all schools and teachers whose involved in this research.

The emotion regulation measurement tool used is the scale of emotion regulation which has three aspects, namely, (1) monitoring emotions, (2) evaluating emotions, (3) changing (modifying). The emotion regulation scale answer choices are consisting of the 5 answer choices, namely Strongly Agree (SA), Agree (A), Neither Agree nor Disagree (N), Disagree (D) and Strongly Disagree (SD). For the favorable items, the choice of the Strongly Agree (SA) has a score of 5, the Agree answer (A) has a score of 4, the Neither Agree nor Disagree answer option (N) has a score of 3, the Disagree answer option (D) has a score of 2 and the choice of answers Strongly Disagree (SD) has a score of 1. For the unfavorable items, the answer choice

Strongly Agree (SA) has a score of 1, the choice of answers Agree (A) has a score of 2, the choice of answers Neither Agree nor Disagree (N) has a score of 3, the other choice of answers does not provide. If the score obtained is higher, then, the teacher is said to have a higher regulation ability. Conversely, if the score obtained is low, then the emotion regulation of the teacher is said to be low.

## RESULTS AND DISCUSSION

The development of instruments can be carried out by following the following stages. The first stage is defining individual constructs that are carried out by operationalizing the constructs. The second stage is searching for the literature and identifying the scales used, the third stage is developing the new scales, and conducting the tests (Hair et al., 2014). Before the instrument was tested on respondents, the researchers took the instrument validation procedure which was carried out through the expert testing to research the items. The scale or research instrument is consulted with the expert (expert judgment) to research the items. The measurement of emotion regulation uses the 3 dimensions of the emotion regulation that is expressed by Thompson (1994), namely: Monitoring, assessment (evaluating), and changing (modification/modifying). The emotional regulation scale blueprint is as follows:

**Table 1. The Blueprint Emotion Regulation Scale**

Number	Aspect	Item
1	Monitoring the emotions	The Favorable Items:
		1. When reprimanding the noisy students in the class, I hold back my anger so as not to overdo it.
		2. I have never been too angry at the bad/naughty students.
		3. I hold my sadness so as not to interfere with the learning process at the school.
		4. I can hold back my anger because I am often reminded by the fellow teachers that this can be detrimental to my relationship with the students.
		5. A calm students' attitude can help me to hold back/refrain my anger.
		6. I can hold back/refrain my emotions because students are able to change when they are told/warned.
		7. I know the cause of the negative emotions that I experienced at the school.
		8. I know the everything what can make me angry in the class.
		9. I know every emotion that I experience influences my behavior at the school.
		The Unfavorable Items:
		10. I find it increasingly difficult to refrain my anger when the students do not pay attention to my words.
		11. When in a depressed situation, I get more irritable/angry.
		12. When the workload increases, my emotions become unstable
		13. I never pay attention to the emotions that I experience when teaching in the class.
		14. My anger is suddenly appearing when the students get noisy in the class.
2	Evaluating the emotions	The Favorable Items:
		15. The anger that is displayed is the something bad that I tried to refrain.
		16. I hold back my sadness because I know the impact that will occur at the school.

Number	Aspect	Item
		17. I hold back my anger because the anger that is displayed can worsen my relationship with the students. 18. I can restrain the anger so that I am not feared by the students. 19. I can reduce my anger because the students immediately show the changes of circumstances what I want. 20. I am still able to complete the teaching and learning process even though I am feeling angry.  The Unfavorable Items:  21. I could not restrain my anger even though I thought it was bad for my relationship with the students. 22. I have difficulty concentrating on teaching when I'm angry. 23. Having many tasks make me feel depressed. 24. I have difficulty coping with the situations that make me angry.
3	Modifying the emotions	The Favorable Items:  25. I hold back my anger by turning my attention to things that are more pleasant. 26. I am able to reduce my emotions because my fellow teachers make some jokes at the office. 27. When I in the conditions get angry, I can control myself to think of the other things. 28. I have my own way to reduce my anger.  The Unfavorable Items:  29. I find it hard to calm my anger by taking mind off. 30. I find it hard to think of ways to calm down when in a stressful situation. 31. I find it hard to change my view of the conditions that make me anxious.

## The Test Validity and Reliability of Measuring Instruments

### *Validity*

The validity test used is the content validity. The method is through rational professional judgment on the scale that has been arranged. Stage one is for research/study the item by the experts. In addition, the researchers have also conducted a readability test on a teacher at the Elementary School Koto Tengah Padang. The assessment shows that there is the item compatibility with the contract used as a measurement tool. The items that have passed the content validation are then rearranged according to the previously designed grid (see the appendix of the instrument grid). The second stage is developing and specifying the measurement model. The specifications to complete the measurement model are done by using the measurement relationships for items and constructs, the correlational relationships between constructs, and the error terms for items (Hair et al., 2014). The construct validity of the research instrument is tested by the Confirmatory Factor Analysis (CFA). The confirmatory tests are carried out to confirm whether the items and dimensions have been confirmed indicators for the research construct (Ghozali, 2014; Hair et al., 2014). The results of the final selection of items on each scale have a loading factor for more than 0.50 with good reliability that is the AVE for more than 0.50, the composite reliability for more than 0.70.

## Reliability

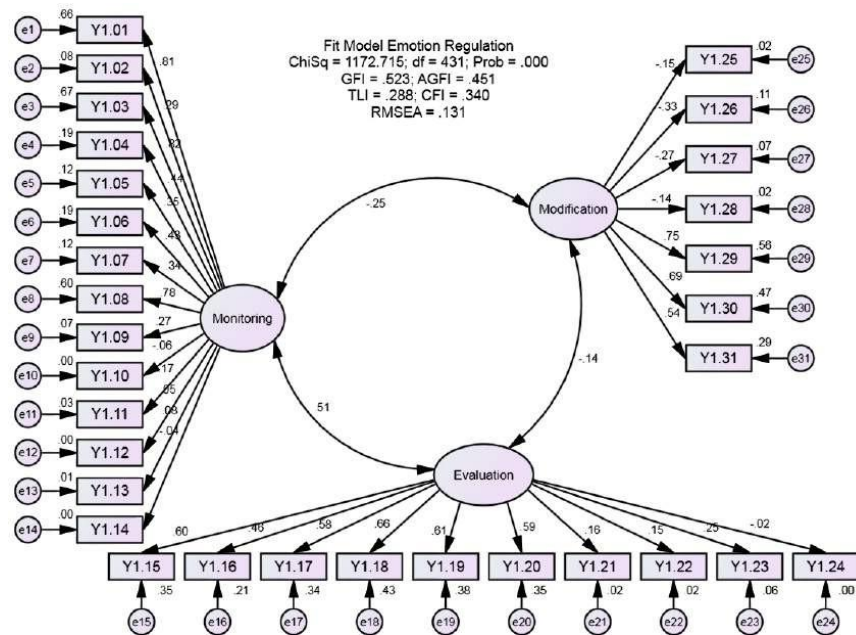


Figure 1. Reliability test

The emotion regulation scale analysis consists of four stages. Figure 1 is the first stage where each item in each aspect is still complete. The emotion monitoring aspect consists of 14 items. Each item has a loading factor of 0.04 to 0.81. The emotion of evaluation aspect has the 10 items with a loading factor of 0.02 to 0.06. The aspect of modifying emotions has 7 items with a loading factor of 0.15 to 0.75. To get a high loading factor, the second step is to remove the items with a loading factor still low. Following are the results of the Phase 2 analysis:

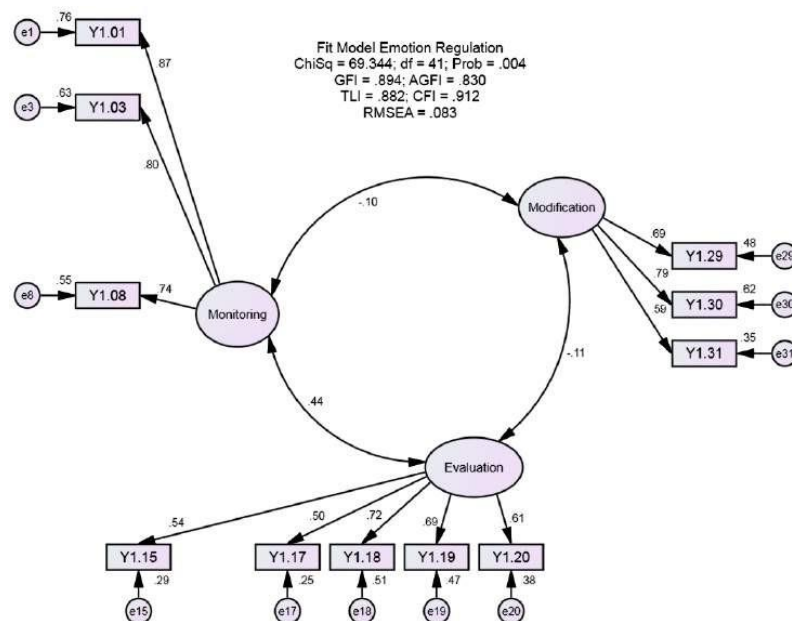


Figure 2. The results of the Phase 2 analysis

Figure 3.2 is the second stage in which each item in each aspect has been selected with a loading factor above 0.5. The emotion monitoring aspect consists of three items, each item having a loading factor of 0.74 to 0.87. The aspect of evaluating the emotions has five items with a loading factor of 0.50 to 0.72. The aspect of modifying emotions has 3 items with a loading factor of 0.59 to 0.79. However, to get the ChiSq, probe, and RMSEA values that are eligible, the stage three is performed. The following is STAGE 3: STD. COV. RESIDUAL> 2.0 AND MODIFICATION INDICES (MI).

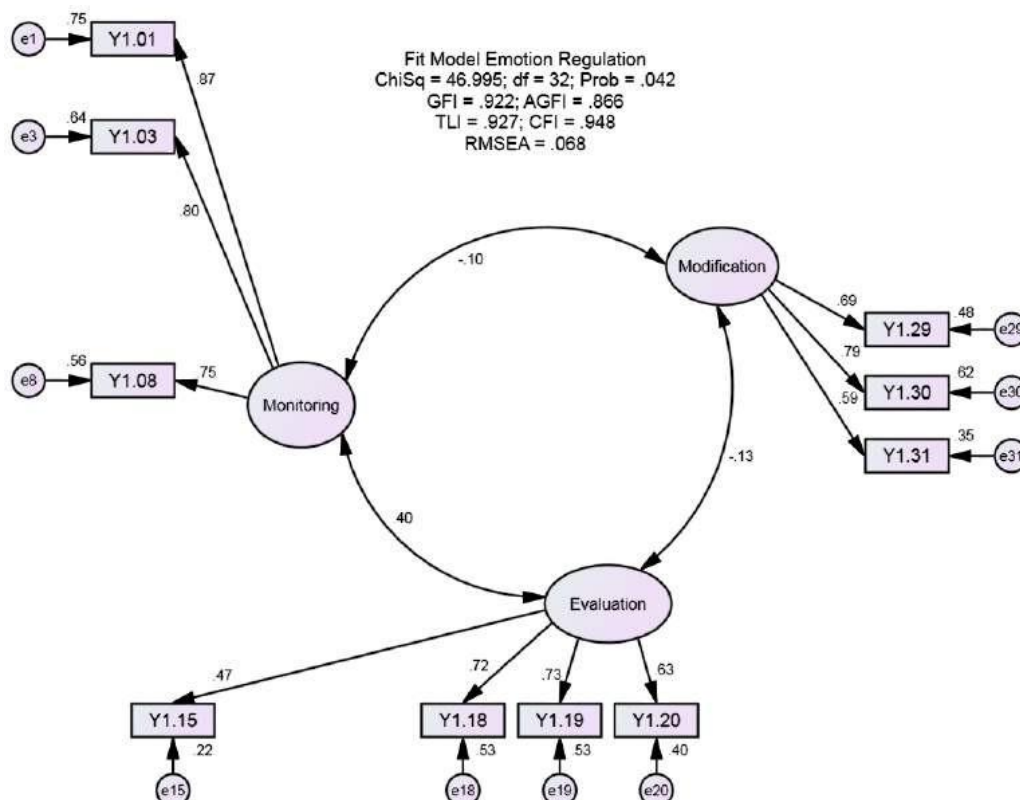
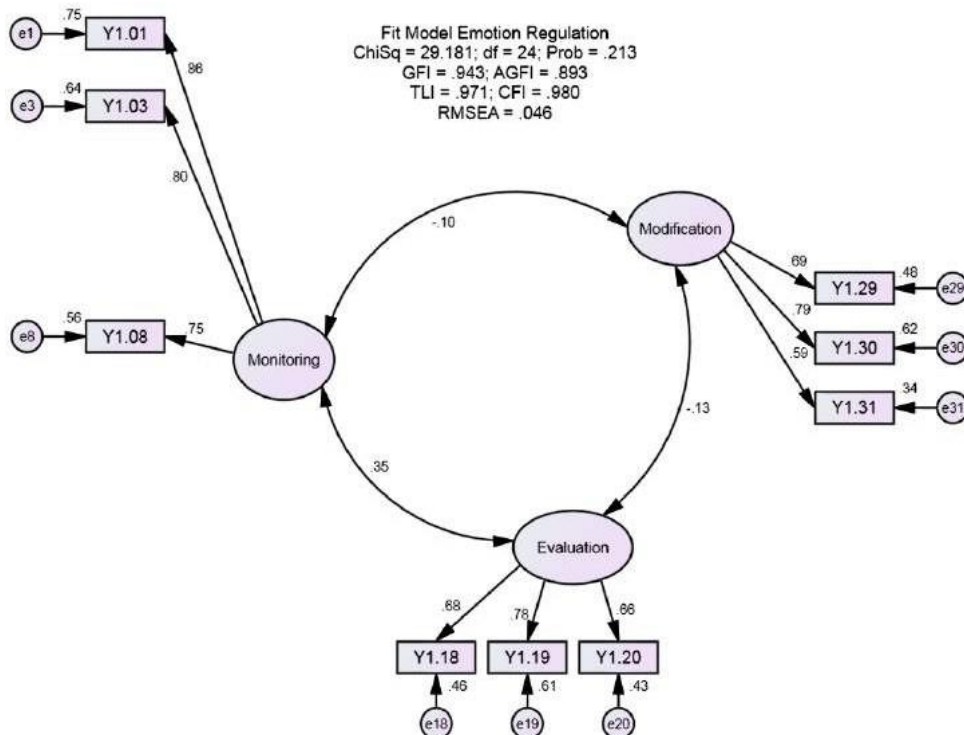


Figure 3. Third Stage Result

Figure 3. is the third stage where each item in each aspect has been selected with a loading factor above 0.50. The emotion monitoring aspect consists of three items, each item having a loading factor of 0.75 to 0.87. The emotion evaluation aspect has four items with a loading factor of 0.47 to 0.73. The aspect of modifying emotions has 3 items with a loading factor of 0.59 to 0.79. However, to get the ChiSq, probe, and RMSEA values that are eligible, then the stage four is conducted, the following is the STAGE 4: LOADING <0.5



**Figure 4. Final CFA Model**

The final CFA model (Figure 4) has 9 items remaining, the all loading factor is valued more than 0.50. The results of the evaluation of the suitability of the model with the chi square = 29.181 ( $p = 0.057$ ), GFI = 0.943, AGFI = 0.893, CFI = 0.980, TLI = 0.971 and RMSEA = 0.046 explained the existence of the good goodness of fit. The results of the validity and reliability of the selected items of the emotion regulation may be summarized in the Table 3.14.

**Table 2. The Validity and Reliability of the Emotion Regulation**

Aspect	Selected Item	Loading Factor ( $\lambda$ )	Average Extracted	Variance	Composite Reliability
Monitoring	Item 01	0.860			
	Item 03	0.800			
	Item 08	0.750			
Evaluation	Item 18	0.680			
	Item 19	0.780			
	Item 20	0.660			
Modification	Item 29	0.690			
	Item 30	0.790			
	Item 31	0.590			
Reliability Value			0.544		0.914

The results of the final selection of items totaling 9, loading factor are valued more than 0.50 with good reliability, that is AVE = 0.544 (more than 0.50), and the composite reliability = 0.914 (more than 0.70).

**Table 3. The Emotion Regulation Scale Blueprint**

The Dimension of Emotion Regulation	Description	Item Number	
		Before	After
Monitoring the emotion	The teacher knows and feels the all kinds of emotions in his/her mind, so that he/she can more clearly to monitor the emotions being faced.	1, 2, 3, 4, 5, 6, 7,8,9,10, 11, 12, 13, 14	1, 3, 8
Evaluating the emotion	The assessment of the effects which is produced when the emotional behavior arises in the school.	15, 16, 17, 18, 19, 20,21, 22, 23, 24	18, 19, 20
Modifying the emotions	Changing the emotions in a positive direction in accordance with the behavior he/she chose and the modification process can be in the form of transferring the emotions to other forms of behavior.	25, 26, 27, 28, 29, 30, 31	29, 30, 31
Total		31	9

The following describes the form of statement items left over from the results of the analysis of the validity and reliability of the emotion regulation scale:

Item Number	Statement
1	When reprimanding the noisy students in the class, I hold back my anger so as not to overdo it.
3	I hold my sadness so as not to interfere with the learning process at the school.
8	I know everything what can make me angry in the class.
18	I can restrain the anger so that I am not feared by the students.
19	I can reduce my anger because the students immediately show the changes what I want.
20	I am still able to complete the teaching and learning process even though I am feeling angry.
29	I find it hard to calm my anger by diverting/switching my mind.
30	I find it hard to think of ways to calm myself down when I am in a stressful situation.
31	I find it hard to change my view due to the conditions that make me anxious.

## DISCUSSION

The interaction of emotions with cognition is important for understanding the emotions and self-awareness, emotion communication, and also the regulation of emotions as the same conceptual process in guiding someone to set their implicit and explicit strategies for managing the emotions (Thompson, 1990). Although the discussion of the theory of Thompson (1990) focuses on the nature of emotions and the emotional development. However, Thompson (1994) also discusses the relationship between emotions and emotion regulation based on how the emotion regulation is conceptualized in the emotion theory. From this perspective, the regulation process is very important to ensure that the emotional attitudes, which have the potential chance to damage the organizational behavior, so that they can contribute constructively to function adaptively. Viewed from this angle, it is easy to see why the emotion regulation is learned as an important element in the social competence, and even in the cognitive skills. That is why the aggression is often described as a problem of one's emotional dysregulation (Thompson, 2011).

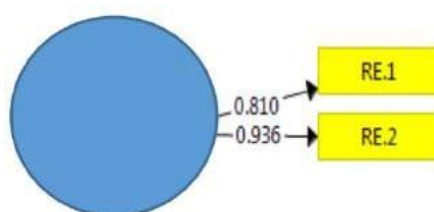
The cognitive approach to understanding the emotions provides a comprehensive description of the effects/influences of the regulation of emotions or their development. The effect of regulation on the emotions is implicit and not voluntary also explicit and strategic, until the



emergence of emotions that is initiated by the individual him/herself and in the certain contexts which has the potential to damage rather than support the behavioral competence. The emotion regulation can provide a more inclusive and comprehensive description of the effect of regulation on emotions. The emotion regulation is the ability to monitor, evaluate, and modify the emotional reactions intensively and temporally to achieve one's goals (Thompson, 1994). The emotion regulation stems from the efforts to regulate one's self by monitoring and evaluating emotions is the first step needed to modify them.

Checking the validity and reliability of the construct is carried out in a number of ways. This test is conducted to assess the convergent validity, discriminant validity, and reliability. A model has good convergent validity if the outer loading value  $> 0.7$ , communality  $> 0.5$ , and the Average Variance Extracted (AVE)  $> 0.5$  (Hartono & Abdillah, 2009). Moreover, a measurement model with an outer loading value of 0.5 to 0.6 is considered sufficient for the research (Ghozali, 2011).

The results of the outer model explain that some aspects have an outer loading of less than 0.50, namely the RE3 (Modifying emotions) aspect. This means that the aspects of modifying the emotions have a weak correlation with the other two aspects are also weak. Good emotional regulation in the teachers is more sensitive measured in the aspects of monitoring emotions (RE1) and evaluating emotions (RE2).



**Figure 5. The Model Evaluation**

The evaluation is made to reduce the aspects of modifying emotions (RE3). Good emotion regulation in the teachers is more sensitive measured in the aspects of monitoring emotions (RE1) and evaluating emotions (RE2) only. According to Kring (2010) the emotion regulation has the aim to minimize the negative impact of the problems faced by monitoring and evaluating the emotional experiences. That is, these two aspects are sufficient to see the teacher's ability to regulate his/her emotions.

The low loading factor on the modification aspect shows that the teacher has difficulty in modifying emotions. The teachers who teach in the Elementary School consider that it is not easy to modify the emotions. Whereas the aspects of monitoring and evaluating the emotions tend to be in line. Teachers who are able to monitor, tend to be able to evaluate the emotions. However, the teachers who are able to monitor and are able to evaluate the emotions may not be able to modify their emotions. Monitoring and evaluating emotions is the first step needed to modify them (Thompson, 2011). The ability to regulate emotion is inseparable from the significant developments in a person's capacity to monitor their feelings, and how they evaluate their emotions by having significant implications for their capacity to manage the emotions. A failure to regulate the emotions and modify them because they lack of the meta-emotional skills to monitor their feelings and remember their ongoing goals and also their emotional evaluation is often limited to how they want to feel rather than consider the long-term consequences of their emotional reactions (Thompson, 2011). The following table describes the form of statement items left over from the evaluation results on the scale of emotion regulation:

Item Number	Statements
1	When reprimanding the noisy students in the class, I hold back my anger so as not to overdo it.
3	I hold my sadness so as not to interfere with the learning process at the school.
8	I know everything what can make me angry in the class.
18	I can restrain my anger so that I am not feared by the students.
19	I can reduce my anger because the students immediately show the changes I want.
20	I am still able to complete the teaching and learning process even though I am feeling angry.

## REFERENCES

- Azwar, S. (2015). *Reliabilitas dan validitas*. Yogyakarta: Pustaka Pelajar.
- Bender, W. N. (2012). *Project based learning differentiating instruction for the 21st century*. California: Sage Ltd.
- Brackett, M. A., Palomera, R., Moisa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-Regulation Ability, Burnout, and Job Satisfaction Among British Secondary School Teachers. *Psychology in the Schools*, Vol. 47, pp. 406–417. <https://doi.org/10.1002/pits>
- Fakhurddiana, F., & Kumara, A. (2009). Pelatihan Komunikasi EMPATIK untuk meningkatkan manajemen kelas di Sekolah Dasar.
- Garber, J., & Dodge, K. A. (2004). Domains of emotion regulation. *The Development of Emotion Regulation and Dysregulation*, (1986), 3–11. <https://doi.org/10.1017/CBO9780511663963.002>
- Ghozali, I. (2014). *Model persamaan structural, konsep dan aplikasi dengan program AMOS 22.00 Update Bayesian SEM*. Semarang: Universitas Diponegoro.
- Gross, J. J. (1999). Emotion and emotion regulation. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality. Theory and research* (2nd ed., pp. 525–552). New York: Guilford Press.
- Hair Jr, J. F., William, C., Babin, B. J., & Anderson, R. E. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage Publication.
- Koole, S. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23(1), 4–41. <https://doi.org/10.1080/02699930802619031>
- Kostiuk, L. M., & Fouts, G. T. (2002). *Understanding of Emotions and Emotion Regulation in Adolescent Females with Conduct Problems : A Qualitative Analysis*. 7(1), 1–15.
- Ramdhani, N. (2012). Adaptasi Bahasa dan Budaya Inventori Big Five. *Jurnal Psikologi*, 39(2), 189–207.
- Strongman, K. T. (2003). *The psychology of emotion*. West Sussex, England: John Willey & Sons Ltd.
- Sutanti, S. (2011). *Hubungan antara kompetensi guru dan kemampuan regulasi emosi dengan perilaku agresi guru di SMK Karya Nugraha Boyolali*. (Tidak Dipublikasikan). Universitas Sebelas Maret, Surakarta.
- Sutton, R. E., & Knight, C. C. (2006). Teachers' emotion regulation. In A. V. Mitel (Ed.), *Trends in Educational Psychology* (pp. 107–136). Hauppauge, NY: Nova Publishers.
- Sutton, Rosemary E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology of Education*, 7(4), 379–398. <https://doi.org/10.1007/s11218-004-4229-y>
- Sutton, Rosemary E., Mudrey-Camino, R., & Knight, C. C. (2009). Teachers' emotion regulation and classroom management. *Theory into Practice*, 48(2), 130–137. <https://doi.org/10.1080/00405840902776418>
- Thompson, R. A. (1994). Emotion Regulation: a Theme in Search of Definition. *Monographs of the Society for Research in Child Development*, 59(2–3), 25–52. <https://doi.org/10.1111/j.1540-5834.1994.tb01276.x>

- Thompson, R. A. (2011). Emotion and Emotion Regulation: Two Sides of the Developing Coin. *Emotion Review*, 3(1), 53–61. <https://doi.org/10.1177/1754073910380969er.sagepub.com>
- Yamin, S. (2014). *Structural Equation Modeling, Rahasia Olah Data LISREL*. Mitra Wacana Media.